

Harrisburg School District Technology Plan

Section 1 - Prepare to Plan

1.1 SCHOOL DISTRICT AND COMMUNITY DEMOGRAPHICS

1.1.1 School District, Community Demographics and School Facilities

The Harrisburg City School District is located in the state's capital in south central Pennsylvania. This is an urban community with a lower socioeconomic status than the surrounding area. There are approximately 50,000 residents within the city limits.

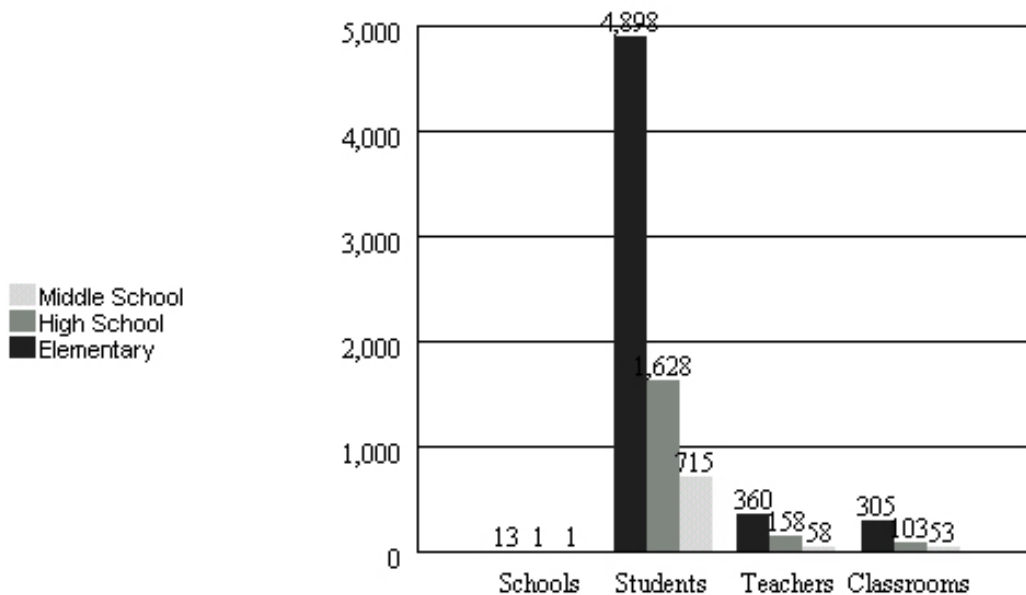
Over half of the property within the District is state/government property, which is exempt from District taxes. This, coupled with the fact that approximately 80% of the households are low income, means that much of the funding for the District must be acquired from sources other than taxes.

The Harrisburg City School District is identified as an "Empowerment District." This means that over the last two years more than fifty percent of the students have scored in the lowest quartile on the Pennsylvania State System of Assessment in math and reading. As a result of this classification, the District was recently taken over by the Mayor of Harrisburg. The District is undergoing major reorganization with new management being put in place.

Seventy-five percent of the students within the District receive free or reduced lunches. Twenty-one percent of the students are considered special needs. In addition, the District has a high drop-out rate (only 35% of students entering 9th grade eventually graduate) and low attendance figures. Many children within the District come from less than ideal homes. The lack of stable income and/or positive role models at home creates challenges in the educational process.

As an Empowerment District, these issues are currently being addressed and programs are being put into place to increase students' success in the Harrisburg City School District.

Currently, the District is undergoing major renovation projects. Fifty percent of the buildings have been completed over the past three years, with two more buildings currently under renovation. As a result, there is overcrowding due to the open buildings handling the student overflow from buildings under construction.



1.2 PLAN PROCESS OVERVIEW AND STAKEHOLDERS

1.2.1 Planning Process Overview

The Technology Planning Committee included 12 members, which led and monitored the technology planning process. The chairperson of this committee was the Deputy Superintendent, Julie Botel. The committee had District representation from the Academic, School Operations, and Technology Departments which included: Parthenia Moore, Chief Academic Officer, Dr. Patricia Harris, Chief Information and School Officer, and John Weaver, Director of the Information Technology Department. Also, a Board of Control member, a parent, a community business leader, a member of the Harrisburg Education Association, a principal and a classroom teacher were on the Technology Planning Committee. Finally, two members of the Information Technology Department were added to coordinate the timeline, information, and submission of the Technology Plan.

Once the 12 members of the committee were identified, the tasks under each phase were assigned to one of the 12 members. Their role was to identify who should be involved in the task. The individuals on the subcommittee could be part of the Technology Planning Committee or other individuals in the District or community that held expertise related to the task. The Technology Planning Committee member would then coordinate the subcommittee meetings for the assigned task by contacting the chosen subcommittee members with the meeting dates, providing the necessary materials, and conducting the meetings. Finally, the subcommittee's final draft was electronically submitted to Julie Lehmer or Michelle Federline for it to be entered into the Etech Planner System.

Once the twelve members of the Technology Planning Committee were identified as well as the subcommittee members, a meeting was held with all parties to give an overview of the technology planning process. A binder containing all the materials from the Etech Planner was given to the committee members as a reference. A timeline for all the phases and due dates was also presented. Four meetings were scheduled of the Technology Planning Committee to review progress. One after phases 1, 2, and 3; one after phases 4 and 5, and one after 6 and 7; and a final meeting after phases 8 and 9. After the final draft was approved by the Technology Planning Committee, the plan was given to the Board of Control for review and approval.

Planning Team Membership List

Name Role/Organization Committees

Julie Botel HBGSD- Deputy Superintendent Main Technology Committee

Donna Cheatham HBGSD-Grant Writer Subcommittee

Kim Cuff HBGSD-Technology Integrator Subcommittee

Tim Curtis HBGSD-Facilities Subcommittee

Michelle Federline HBGSD-Database Administrator Main Technology Committee

Dr. Patricia Harris HBGSD-Assistant Superintendent/School and Improvement Main Technology Committee

Brett Henry HBGSD-Network Manager Subcommittee

Mark Holman HBGSD-Human Resources Subcommittee

Rebecca Hostetler HBGSD-Principal Main Technology Committee

Norm Jones HBGSD-Community Relations Subcommittee

Julie Lehmer HBGSD-Webmaster/Distance Learning Coordinator Main Technology Committee

Gloria Martin-Payne HBGSD-Control Board Member Main Technology Committee

Parthenia Moore HBGSD-Assistant Superintendent/ Chief Academic Officer Main Technology Committee

Ron Morrett EMO-Community Business Leader Main Technology Committee

Sandra Myers HBGSD-Social Services Subcommittee

Mary Nardo HBGSD-Academic Services Subcommittee

Betty Ann Petroski HBGSD-Academic Services Subcommittee

Jeff Slater Harrisburg Education Association Main Technology Committee

Eugenia Smith HBGSD-Student Services Subcommittee

Nancy Snyder HBGSD-Teacher Main Technology Committee

John Weaver HBGSD-Director of Information Technology Main Technology Committee

Susan Wilson Parent/Community Member Main Technology Committee

Angel Woods HBGSD-Daily Operations Subcommittee

Holly Worful HBGSD-Voice Communications Subcommittee

1.3 TECHNOLOGY AND EDUCATION REFORM

1.3.1 Technology Practices and Education Reform

Technology allows teachers to expand learning opportunities for students and improve the teaching process. Virtual field trips can enhance the traditional classroom. Instant availability to web sites allows teachers to research new teaching strategies and develop their teaching style. Intranets allow teachers to share and contribute tips for "Best Practices" as well as learning and teaching strategies for the teacher and student. Technology can increase Professional Development options and supports the "Train the Trainer" model. Student Management Systems provide for instant review of student information, report cards, and digital portfolios. It allows the teacher to effectively communicate with parents and administrators on students' progress through 24-hour access to information.

A variety of software programs is aligned with the PA Academic Standards. Teachers can use this software to create and design creative instructional lessons that can be adapted and directed to a student's individual learning style. These software programs provide students multiple opportunities for expanded learning at their individual pace and level. Software programs are also targeted to develop and strengthen the students' progress as they achieve state standards. Distance Learning using video conferencing and online courses offer students more opportunities to take classes that will expand and enhance learning. The Internet supports student research while an Intranet allows students to share ideas and learn from other students. Through the use of technology, students' progress can be monitored.

As a result, technology can reform education; it can improve teaching, enhance student learning, and provide greater organizational efficiency.

Section 2 - Build Communications

2.1 MISSION AND VISION STATEMENTS

2.1.1 Technology Mission Statement

The Harrisburg School District will provide all students with technological proficiency to further their success in future education and to provide a solid foundation to compete in the global market place. With the collaboration of students, teachers, parents, community, and business partnerships, we will seamlessly integrate technology into the curriculum, which is aligned with the Pennsylvania academic standards. We believe technology serves as a catalyst in the transition from traditional learning to a student-centered, problem solving approach that will produce critical thinkers, productive citizens, and effective communicators in the 21st Century.

2.1.2 Technology Vision Statement

The Harrisburg School District will prepare students to be life-long learners and analytical thinkers. Utilizing the latest technology and through an integrated curriculum aligned with the Pennsylvania academic standards, we will increase students' literacy, develop students' strategies for problem-solving and critical thinking, and enhance their abilities in processing information and decision-making. As we increase access to educational and technology resources, and promote their ethical use, we will also improve communication and collaboration among students, parents, educators and the community to realize our goals of increased student achievement and success, supported and encouraged by a caring and positive learning community.

2.2 ONGOING COMMUNITY COMMUNICATION

2.2.1 Ongoing Community Communications

In the spring of 2001, the District was placed under the direction of the Mayor of Harrisburg through the Empowerment Act. Under his leadership, a Board of Control and a new administration were put in charge of the District. Prior to this change, communication in all areas throughout the District was lacking. There was little interdepartmental exchange of information with communication fragmented by departments. Lack of adequate staff also resulted in the breakdown of communication. Local resources such as news, radio and television were not used for positive public relations. Finally, the lack of technological literacy throughout the District made email and the District web site virtually useless. Under the new leadership, a Community Relations Department was formed to produce a district newsletter, organize media events, and promote public relations. Prior to this department, most district news was placed on the web site. Presently, cooperation between the Community Relations Department and the Web Master has lead to a more informative site for the educational community. Also, a Policy and Procedure Committee was formed by the new Superintendent to address all areas of the District. It will have a positive effect of creating and communicating Technology Policies and Procedures as well. In the last year, a Technology Integration and Training Division was formed to address the technological literacy needs of staff.

Due to these changes being in their infancy, challenges still exist. As a district, we need to ensure our technology mission and vision remains in line with our District Strategic plan, then communicate it through a variety of methods to all stakeholders. In the community, we need to foster a general understanding of technology, how it can be integrated to benefit students, and how we plan to achieve our technology vision, mission and goals. These same messages need to be communicated to parents and students. However, to students and parents we also need to communicate what is available to students in the area of hardware, software, academic programs, and curriculum. For the District staff, we need to establish protocols for communication regarding technology, train staff in technology literacy and integration, and create a central library for technology resources. With the formation of the Community Relations Department, there will be a more effective use of media as a new avenue for the District to communicate to our target audience about technology. Parent coordinators can also be utilized to communicate information about technology to our parents and students. Finally, with the new District leadership emphasizing cooperation, and the Director of Technology being made part of the Superintendent's cabinet, the foundations have been laid for more communication and cooperation among departments.

Community Communications Plan

Message: The mission, vision, and goals for technology in the District
Audience: Teachers, Administration, Board, Parents/ Students, Community
Methods: Web Site, District Newsletter
Resource Deputy Superintendent, IT Director, Webmaster, Community Relations
s: Department: Printing Expenses
Timeline: Ongoing
Evaluatio Compiling comments; correspondence and feedback from all audiences
n:

Message: Grant initiatives currently being implemented to support the Technology Plan
Audience: Board, Administration, Community, Teachers, Local Stakeholders
Methods: District Website, Grant Related Meetings, e-mail
Resource Community Relations Department, Grants Office, Administration, IT
s: Director
Timeline: Ongoing effort
Evaluatio Number of Grants applied for and received; Level of participation in writing
n: and implementing grants

Message: Current technology curriculum and academic technology programs being offered to students
Audience: Parents/ Students, Community, Teachers
Methods: Course Catalog/Syllabus, Brochure
Resources: Counselors, Parent Coordinators, Teachers Principals, Academic Services: Printing Expenses
Timeline: Yearly
Evaluation: Comparison of curriculums and programs offered by surrounding schools;
n: Number of students enrolled in technology programs

Message: The current status of technology, training and integration in the District.
Audience: Teachers, Administration, Board, Parents/ Students, Community
Methods: Web Site- training schedule, District Newsletter, Technology Resource Representatives (TRR) Meetings
Resources: Web Master, Technology Integrator, IT Director, Community Relations Department, TRRs: Printing Expenses
Timeline: Overall Technology Status- yearly; Training and Integration- Ongoing
Evaluation: Surveys, Number of participants in trainings, Number of courses being offered
n:

Message: Benefits of curriculum software, current status, and student achievement gains
Audience: Parents/ Students, Administration, Teachers
Methods: Back to school nights/ Open Houses, Teacher Feedback to Parents/Students, Brochures, District and School Newsletters
Resources: NCS Learn Representatives, Parent Coordinators, Teachers, Technology Integrator, Building Level NCS Learn Coordinator: Printing Expenses
Timeline: Quarterly
Evaluation: Number of teachers using NCS Learn, Amount of time students use NCS Learn, Number of reports being run and analyzed, Number of participants in NCS Learn training
n:

Message: Current and future partnerships being formed to support technology initiatives
Audience: Board, Administration, Community Parents/ Students, Local stakeholders
Methods: District Newsletter, Articles in newspaper/ magazines
Resources: Community Relations Department, IT Director, Grants Office, Business Leaders: Printing Expenses
Timeline: As partnerships are formed
Evaluation: Comparing number of partnerships each year and evaluation; Compiling comments, correspondence and feedback on partnerships
n:

2.3 PARTNERSHIPS AND COMMUNITY LINKAGES

2.3.1 Current & Potential Partnerships and Community Linkages

To date, Penn State University has provided the District limited staff development and training, as well as assistance in writing technology grants. AVAYA, a communications company, has donated approximately two million dollars in equipment for the network and phone system. These two partnerships are currently being expanded, while new partnership initiatives are being developed.

We have met with Penn State to acquire their assistance in analyzing District data. This will help the District in making data driven decisions. Harrisburg Area Community College will also provide training for staff, and assistance in writing and implementing technology related grants.

While AVAYA has donated equipment, our partnership will be expanding to include potential student internships, as well as utilizing their expertise in developing a technology curriculum for students. Our partnership with EMO, an infrastructure wiring company, will be similar to AVAYA, but in a different area of technology. EMO will assist the

District in network and phone cabling needs while also training student interns. They will also be of assistance in developing a technology curriculum for students. The role of the PTA/PTO's in each school will be to provide instructional and technology assistance in the classroom as well as fostering communication with parents. Finally, plans for working with the State Library to provide our students with more research and reference materials electronically are being considered.

Investigation of Potential Partnerships List

A. Public Libraries

State Library

Contact Name:

Contact Phone:

Description of Potential Partnership:

make State Library resources available to students electronically

Possible Benefits to School District:

more research and reference materials for students

Possible Benefits to Group or Organization:

potential grant funding

Potential Contribution to District Technology Planning Effort:

cost effective method of providing students with more research and reference materials electronically

B. Higher Education

Penn State University

Contact Name:

Contact Phone:

Description of Potential Partnership:

collaborate on technology grants; provide staff development; assist in analysis of district data

Possible Benefits to School District:

increased revenue from grants; assistance with quality staff development; compiling information for making informed decisions

Possible Benefits to Group or Organization:

potential for post graduate work and funding from grants

Potential Contribution to District Technology Planning Effort:

expertise in the areas of grants, staff development and data analysis

HACC

Contact Name:

Contact Phone:

Description of Potential Partnership:

staff training; collaboration on technology grants

Possible Benefits to School District:

reduced expenses associated with training; increased revenue from grants

Possible Benefits to Group or Organization:

funding from grants; revenue from training

Potential Contribution to District Technology Planning Effort:

expertise in writing grants and assistance in training

C. Parent Organizations

PTA/PTO

Contact Name: Eugenia Smith

Contact Phone: 717-703-4000

Description of Potential Partnership:

increase communication with parents; instructional and technology assistance for students

Possible Benefits to School District:

increase student achievement through parent volunteers in the classroom providing instructional and technology assistance; increased parental involvement and communication

Possible Benefits to Group or Organization:

involvement in child's education; participation in making positive change; technology training

Potential Contribution to District Technology Planning Effort:

will help in integrating technology

D. Businesses

EMO

Contact Name: Ron Morrett

Contact Phone:

Description of Potential Partnership:

donations or reduced costs for network and phone cabling needs; provide student mentor/training opportunities

Possible Benefits to School District:

reduced costs for infrastructure; student internships

Possible Benefits to Group or Organization:

future potential employees trained by vendor; advertising

Potential Contribution to District Technology Planning Effort:

provide needed infrastructure; assistance in developing technology curriculum and internships

AVAYA

Contact Name:

Contact Phone:

Description of Potential Partnership:

assistance in planning and supporting network infrastructure and PBX system; donation or reduced cost of equipment

Possible Benefits to School District:

potential student internships; state of the art network and phone system design and equipment

Possible Benefits to Group or Organization:

future potential employees trained by vendor; advertising

Potential Contribution to District Technology Planning Effort:

provide needed expertise in network and phone design; assistance in developing technology curriculum and internships

Section 3 - Assess Current Status

3.1 SUCCESS OF PREVIOUS PLAN

3.1.1 Technology Goal Attainment

The Harrisburg School District's previous Technology Plan was a one-year interim plan. Work was accomplished toward all of the goals outlined in the plan. However, due to the District takeover, restructuring associated with the District's classification as an Empowerment District, and lack of funds, a few of the objectives were not completed or were postponed until next school year.

The Information Technology (IT) Department has been expanded to include a new Integration Division. This division includes three much needed positions: two Technology Trainers and a Technology Integrator. An extensive training schedule is in place with both required and optional courses for all staff within the District. Teachers are learning how to use District software in the classroom to enhance students' learning experiences and to provide data driven instruction. In addition, Technology Resource Representative positions have been established at the building level to assist the IT staff in supporting the technology within the District.

The library of educational software has been expanded to include more titles, as well as additional licenses for existing titles. Also, new equipment (laptops, desktops and printers) has been purchased for the newly renovated buildings and to replace older, obsolete equipment in other buildings.

When teachers have the appropriate training and utilize the available technological tools, there has been a noticeable increase in student achievement. Although the current technology curriculum is outdated, the Curriculum and IT Departments are working together to develop a plan that will ensure students are given every opportunity to gain the technical skills necessary for the work force today.

With the continued support of the Harrisburg Education Association (the Teachers' Association) and the current District administration, the IT Department will continue to assist teachers and staff in providing students with the tools necessary to receive a quality education.

3.2 CURRICULUM AND STUDENT ACHIEVEMENT

3.2.1 Assessment Strengths and Weaknesses

Building administrators, teachers, and central office administrators have reviewed assessment data that included: attendance, grades, nationally- normed standardized tests (SAT9), as well as the PSSA (Pennsylvania State System Assessment). In addition, information from Target Teach, a standards-based assessment tool, and National Computer Systems Learn (NCSLearn), a computerized assisted instructional tool, was analyzed.

A positive trend is the growth of the 8th grade PSSA scores. Fewer students scored in the bottom quartile in Reading and Mathematics over a period of three years. It also appears that our students have grown in grade equivalency on

nationally normed assessments over the past three years; however, our assessment measures have changed in that time period (MAT7 to SAT9). It is still evident that we have room for much improvement at all grade levels and in both Reading and Mathematics.

Improvement has been noted through the implementation of several standards-based district initiatives such as Target Teach, Performance Based Assessment, and NCS Learn. Further efforts presently underway are: additional computers in the classrooms; FastForWord; more access to and awareness of global technology and technology resources; promotion of ethical, responsible and collaborative use of emerging technologies; promotion of knowledge and skills to engage in lifelong learning; enhancement of communication among parents, community and schools; and addressing the diversity of all ethnic groups.

The challenges facing the district in trying to improve test scores and academic achievement include: low student attendance; the transient nature of our student population; leadership changes and district reorganization (staff grade and building reassignments); the lack of professional development; and the limited use of technology in the classrooms.

3.3 STUDENT AND STAFF TECHNOLOGY SKILLS, KNOWLEDGE, AND USAGE

3.3.1 Student Technology Access, Attitudes, Skills and Usage

Student resources are most readily available on a consistent basis for children in their school environments. Although some students have access to the Internet at home, it is most constant when Internet and the latest technology are provided at school.

Students view technology positively and are eager for more opportunities within the school day and extended day to expand their experience and knowledge with technology.

Basic mastery in technology is termed as proficiency in word processing, Internet skills, and basic computer operations. The students are not presently demonstrating mastery, which may be a result of sporadic exposure and/or lack of instruction teaching the necessary skills in the elementary level. Upon completion of the eighth grade technology curriculum students consistently demonstrate basic mastery in the above listed skill levels. Student skills do not, at this point, exceed staff skills. Students use the computer for email and entertainment. Students report to a lesser extent using the Internet to acquire new information and for research purposes.

At the elementary level, technology is used mostly for computer assisted instruction providing opportunities for reinforcement of lessons taught within the classroom environment. Formal technology application skills begin at the middle and high school levels. Once students are provided opportunities to discover what technology can do for them academically, the natural curiosity for learning is piqued. Once students become aware of what technologies are available, they are motivated to acquire and apply new skills. Technology provides a window to the world for children who may not otherwise have opportunities for new experiences.

3.3.2 Staff Technology Access, Attitudes, Skills and Usage

Most staff have access to a computer with Internet capability at home. The district provides networked computers with Internet access to each staff member as well. Most teachers are eager to integrate technology within curricular areas given the proper resources. Review of the most current research supports the establishment of both a formal lab setting within the school for instruction as well as an adequate supply of computers for practice and integration of the curriculum within the classroom.

Currently 50% of the staff are proficient in basic usage of technology. Another 25% are demonstrating skills at an adequate level to support their job requirements. Within the proficiency levels there are varied degrees, quite possibly related to level of personal interest. Staff skill levels still do exceed that of the students they teach. However, teachers still more commonly use overheads or the chalkboard rather than available technology. This reality may be due in great part to the lack of availability of the technology within the classroom and lack of training. The availability of the technology coupled with the expectation of technology integration within the curriculum contributes to how quickly staff embraces technology. Accountability to integrate technology is needs to be embedded in the evaluation process.

3.4 TECHNOLOGY INVENTORY

3.4.1 Quality, Quantity, and Distribution of Technology Resources

There has been a concentrated effort over the past few years to update the hardware in the schools. As buildings are renovated, all equipment is replaced and each classroom is equipped with a teacher workstation, six to ten student workstations and at least one printer. Labs of at least 20 computers are also being installed in each school, with the number of labs being determined by the principal and technology department. Library media centers are being set up in each of the buildings. Equipment removed from the renovated buildings is redistributed based on need to the remaining buildings, with older equipment being retired. As a result, a majority of the machines in the district are in the highest category of functionality. The high school and the non-renovated elementary schools have the greatest need for equipment at this time.

All computers within the district are connected to the WAN with 10/100 megabit Ethernet and thus have access to the district network as well as the Internet. There is at least one machine available for teacher use in every classroom. All machines have the following software packages installed: Microsoft Office (Word, Excel, Power Point, Access), GroupWise e-mail, Netscape and/or Internet Explorer, Excelsior and Host Presenter to access the Pentamotion system (financial and student management systems). In addition, the newer machines have Microsoft Publisher and Mavis Beacon typing. There are licenses installed on student machines for NCS Learn, a software package used to assess and re-enforce skills aligned with PA State Standards. Also on student machines are various educational titles based on individual teacher requests from the district software library. Library Pro is the utilized for library management, and Norton AntiVirus is managed centrally from the servers for anti-virus protection. The greatest needs at this point are to expand the software library to include course specific software aligned with state standards and the district curriculum, and to train teachers on this software.

3.4.4 Summary Charts

Computer Systems Functionality and Distribution Matrix

The Matrix reads left to right and shows the quantity and percent of each category of computers across the school levels. For each level the quantity and percent are divided into instructional and administrative. Use this matrix to compare the distribution of a category of computers over all the school levels i.e., how many of category A computers does the elementary school have compared to the high school.

		Elementary School 13 Schools		Middle School 1 Schools		High School 1 Schools		Total 15Schools	
Category A		Instr.	Admin.	Instr.	Admin.	Instr.	Admin.	Instr.	Admin.
<ul style="list-style-type: none">Age less than 18 months64 MB RAM minimumMore than 6GB HD48x CD-ROM or CDRW or DVD17 inch monitorMacintosh G4 or abovePentium III or aboveReadily serviceable	QUANTITY	2731	215	443	25	280	53	3454	293
	PERCENT	79.07%	73.38%	12.83%	8.53%	8.11%	18.09%	100%	100%
Category B		Instr.	Admin.	Instr.	Admin.	Instr.	Admin.	Instr.	Admin.

<ul style="list-style-type: none"> • 18 to 36 mos. old • 32 MB RAM minimum • More than 2 GB hard drive • 24x CD-ROM or DVD drive • 15 inch multiscan color monitor minimum • Macintosh G3 or above • Pentium II MMX or above • Runs latest versions of complex software packages • Readily serviceable 	C U L A M I T Y	205	30	0	2	157	8	362	40
	P E R C E N T	56.63%	75.00%	0.00%	5.00%	43.37%	20.00%	100%	100%
Category C		Instr.	Admin.	Instr.	Admin.	Instr.	Admin.	Instr.	Admin.
<ul style="list-style-type: none"> • 3 to 5 years old • 8-24 MB RAM • 160 MB to 2 GB hard drive • 4x to 12x CD-ROM drive • 14 inch multiscan color monitor minimum • Macintosh PowerPC • Pentium • Runs most software packages well • Readily serviceable 	C U L A M I T Y	129	4	0	0	123	3	252	7
	P E R C E N T	51.19%	57.14%	0.00%	0.00%	48.81%	42.86%	100%	100%
Category D		Instr.	Admin.	Instr.	Admin.	Instr.	Admin.	Instr.	Admin.

<ul style="list-style-type: none"> • More than 5 years old • Less than 8 MB RAM • Less than 150 MB hard drive • Standard 14 inch VGA color monitor • Macintosh 040 systems • 486 CPU • Software limitations exist • Limited serviceability 	C U L A M I T Y	0	0	0	0	0	0	0
		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%

Student to Computer Ratio and Computer Distribution Matrix

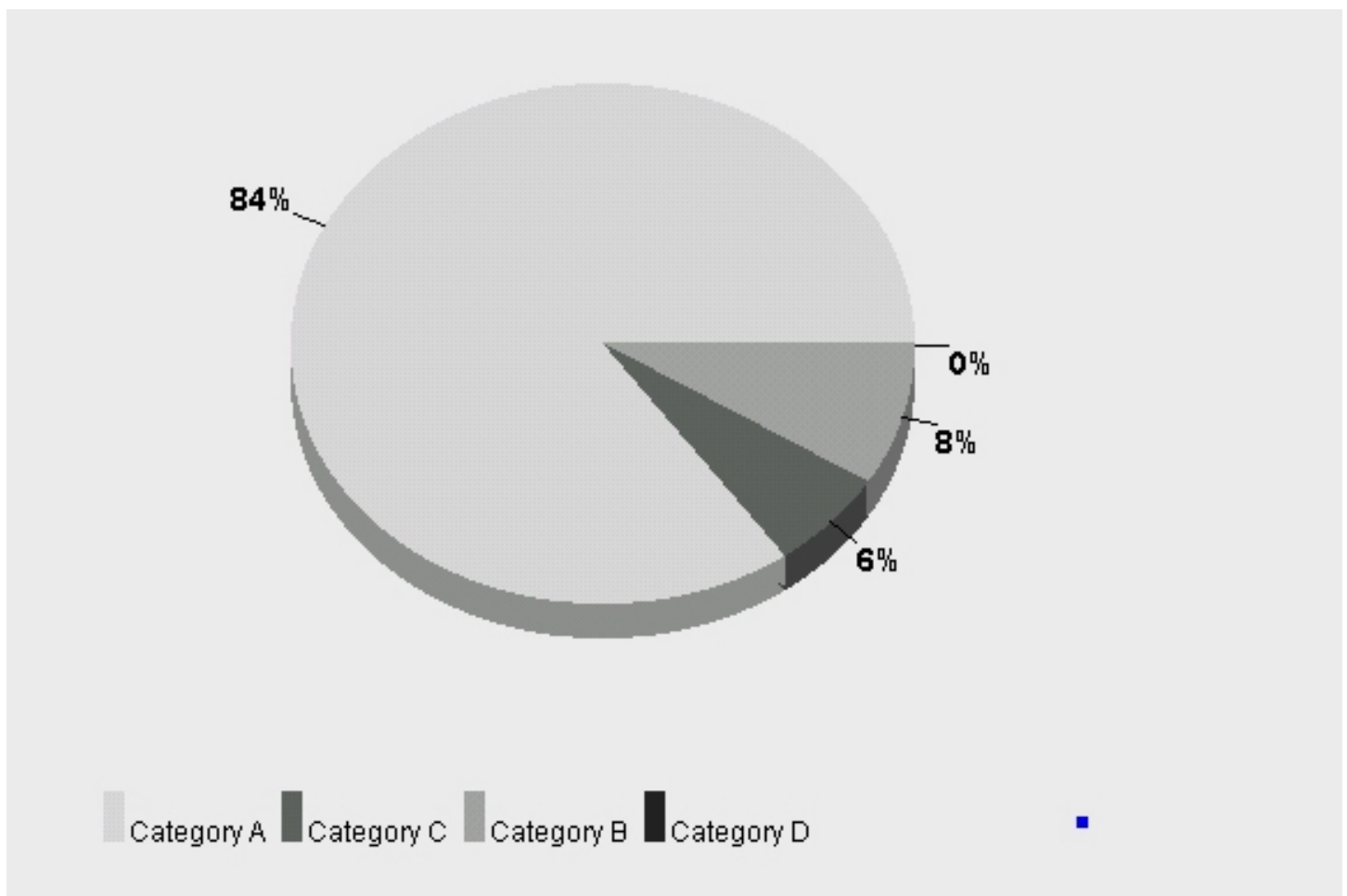
The Matrix reads top to bottom for each level and shows the student to computer ratio (number of students to number of computers) for each level as well as the distribution of each category of computers across the level. For each level the quantity and percent are divided into instructional and administrative. Use this matrix to see the distribution of the functionality categories across a school level i.e., percentage of each category A, B, C, and D at the elementary school.

	Elementary School		Middle School		High School		Total	
# of Students	4898		715		1628		7241	
# of Schools	13		1		1		15	
Total # of Computer Systems	3314		470		624		4408	
Total # of Instructional Systems	3065		443		560		4068	
Total # of Administrative Systems	249		27		64		340	
Ratio of Computers to Students	0.63		0.62		0.34		0.56	
CATEGORY A								
Total # of Category A	Instructional	273 1	Instructional	44 3	Instructional	28 0	Instructional	345 4
	Administrative	215	Administrative	25	Administrative	53	Administrative	293
% of Instructional Category A	89.10%		100.00%		50.00%		84.91%	
% of Administrative Category A	86.35%		92.59%		82.81%		86.18%	
CATEGORY B								
Total # of Category B	Instructional	20 5	Instructional	0	Instructional	15 7	Instructional	381 6
	Administrative	30	Administrative	2	Administrative	8	Administrative	333

% of Instructional Category B	6.69%	0.00%	28.04%	8.90%
% of Administrative Category B	12.05%	7.41%	12.50%	11.76%
CATEGORY C				
Total # of Category C	Instructional	129	Instructional	0
	Administrative	4	Administrative	0
% of Instructional Category C	4.21%	0.00%	21.96%	6.19%
% of Administrative Category C	1.61%	0.00%	4.69%	2.06%
CATEGORY D				
Total # of Category D	Instructional	0	Instructional	0
	Administrative	0	Administrative	0
% of Instructional Category D	0.00%	0.00%	0.00%	0.00%
% of Administrative Category D	0.00%	0.00%	0.00%	0.00%

Distribution of Computers by Functionality Category Chart

Chart displays the percentage of each category of computers at the instructional level for all the school levels combined.



3.5 FACILITIES

3.5.1 Facilities

The Harrisburg School District makes use of various technology-enhanced learning environments in the buildings. These methods are used to emphasize the availability of the technology that is accessible throughout the district. A typical Computer lab consists of an average of 24 student stations, 1 network printer, and 1 teacher station. The building principal determines the location of the labs and scheduling for usage.

A typical classroom is set up with a minimum of 7 data drops, one of which is designated for the teacher workstation and the remaining for student workstations. All classroom computers have access to the school district network. Renovated buildings are being provided with metal Laptop carts, which contain 10 laptops and 1 printer. One (1) cart per room is the typical distribution. The portable carts utilize wireless technology to connect to the network and the laptops can be utilized in other parts of the building although distribution changes are at the principal's discretion. By using laptop carts we have reduced the electrical requirements drastically.

Teachers' workstation access to the network provides e-mail, Internet access, a space to share files, and access to networked printers. The student workstations access to the network provides Internet access and access to networked printers.

The ergonomic capabilities in most areas are limited. Generally, standard desks, tables and chairs are used. Some labs do have computer-based tables. Lighting in these rooms is standard fluorescent lighting as in all classrooms. Within the various schools the only areas that require temperature-controlled zones are the network distribution locations commonly called MDF or IDF. These rooms typically house switches, hubs, and other network distribution equipment.

3.5.2 Facility Problem Areas

Area(s) of Concern:

1. Power to switches at various locations in the building. Occasionally a power disruption will cause loss of network access to a building in whole or in part. The remedy would be installing a UPS on the equipment housed in the MDF and IDF locations.
2. Security of the MDF/IDF locations. Access to these rooms is available to too many persons. Room access should be limited to IT personnel and Facilities Supervisor. This room should not be used for any other purposes.
3. Lack of proper ventilation and cooling of the MDF/IDF rooms at the non-renovated buildings.
4. Lack of a proper fire-suppressant system in the MDF/IDF rooms at the non-renovated buildings.
5. At the non-renovated buildings, classrooms lack proper temperature-controlled cooling to run the current technology.
6. At the non-renovated buildings, classrooms lack proper electrical wiring.

3.6 DISTRICT INFRASTRUCTURE PLAN AND DESIGN

3.6.1 Building/District Level Networking

The Harrisburg School District is one wide area network (WAN) with an ATM backbone over fiber. Each school is a separate local area network (LAN), for a total of 17 LANS though out the District. All the buildings are linked by OC12 fiber. All servers for the District are housed currently at the Administration Building. In all renovated buildings, the classrooms have a minimum of six computer access points for students and one for teachers. In buildings that have not yet been renovated, each classroom has a minimum of one computer access point. Authorized users at all buildings have access to the WAN. Avaya (formerly Lucent) monitors and troubleshoots our ATM network. The District has a T1 line for Internet access. The telephone system connects to the network in each building at a connection speed of OC-3. The security video system and electronic locks run over the fiber optics with a connection speed of T1. Our distance learning capabilities run over the network as well.

3.6.2 Telecommunications Service Distribution

All buildings have Internet access through a T1 line at the Administration building. EPIX is our current ISP provider. In all renovated buildings, the classrooms have a minimum of seven computer access points for students, teachers and network printer(s). In buildings that have not yet been renovated, each classroom has a minimum of one computer access point. The District uses Cyber Patrol to limit access to inappropriate sites. Border Manager software serves as our firewall and tracks Internet usage. Current use of the Internet by students is for research and class assignments. For faculty and staff, their usage includes lesson ideas, supplemental material for lesson plans and email. Future plans include providing email to students. There is currently a District web site as well as a web site for each school. A board approved Internet policy is in effect for both students and staff. Anticipated future needs for the District would require upgrading to a T3 line, providing Internet access to students at home, and expanding dial-in capabilities to support more users.

Our telecommunications capacity for the District is approximately 95%, due to major renovation projects. The telephone system is an AVAYA Definity G3R. This digital system works over the District's network. The District standard is a minimum of one phone line for every classroom and office. There are voice mailboxes for all

administrative and teaching staff, with the ability to check these mailboxes from outside the District. A call accounting system records incoming and outgoing telephone calls. Aldephia, our local service provider, has been cooperative and responsive. Sprint is our long distance carrier through Aldephia. Also, the District uses Nextel two way radios/cellular phones for all principals, administrators and some support staff.

3.6.3 Video Distribution and Distance Learning Capabilities

Seven of our newly renovated schools have media centers, which can stream video to any classroom TV. All other schools will be updated as they are renovated, but until then they use moveable TV/VCR carts. Distance learning runs over the ATM network and phone system. Our current distance learning equipment is on moveable carts, so technically they can be moved to any classroom. Each school has two of these distance learning carts. However, due to the set up time involved, all schools are choosing one room to set up for the purpose of distance learning activities. Unfortunately, most of these rooms are libraries or regular classrooms, due to overcrowded conditions as a result of renovations. There has been a limited use of distance learning for virtual fieldtrips. This limited use results from the lack of teacher training, lack of room availability and lack of technical support personnel.

3.7 TECHNOLOGY SUPPORT SERVICES

3.7.1 District Technology Support Service Functions

The Information Technology Division is divided into three departments: Network, Daily Operations and Technology Integration. The Network Department handles network management, email, standard and wireless telecommunications, the district website, and distance learning. The Daily Operations Department handles PC repair, software support and other day-to-day support tasks. The Integration Department deals with training, integration and NCS Learn support (curriculum software). Also, each building has at least one teacher that serves as a Technology Resource Representative. This position acts as a liaison between the buildings and Information Technology Division. The Technology Resource Representatives meet monthly, with special training sessions conducted as necessary. All three areas and the Technology Resource Representatives are under the direction of the Information Technology Director.

The District has approximately 4,500 PCs, 17 buildings, approximately 1,000 staff and 7,300 students to support. Even with the three departments in Information Technology, the District is understaffed and inadequately funded to meet the four services of Learning and Technology Resources and Services, Information Management Services, Communication and Network Infrastructure Services, and Operations, Maintenance and Support Services. Another obstacle is lack of space for staff and equipment.

In the area of Learning and Technology Resources and Services, the Network Department and Integration Department at the District Level divide the functions. The overall rating in this area is moderate to serious delays in these services, thus not keeping pace with the demand or need. A very small part of these functions are handled at the school-level or are outsourced. The one function that is needed but not currently provided is TV Technology and Multimedia support due to lack of audio visual personnel at the building level.

In the area of Information Management Services, the Daily Operations Department at the District Level handles most of the major functions. The overall rating in this area is moderate to serious delays in these services, thus not keeping pace with the demand or need. A very small part of these functions are handled at the school-level or are outsourced. The one function that is needed but not currently provided is Information Processing Tools/Standards due to constant changes in technology and lack of staff time.

In the area of Communication and Network Infrastructure Services, the Network Department at the District Level handles most of the major functions with some support by the Operations Department. The overall rating in this area is moderate delays in these services, thus not keeping pace with the demand or need. A very small part of these functions are outsourced.

In the area of Operations, Maintenance and Support Services, most of the major functions are handled by the Daily Operations Department at the District Level. The overall rating in this area is moderate to serious delays in these services, therefore thus not keeping pace with the demand or need. A very small part of these functions are outsourced. The one function that is needed but not currently provided is Electronic Project Management due to lack of staff training.

3.8 STAFF DEVELOPMENT

3.8.1 Importance of Staff Development

The primary responsibility for staff development with regard to technology falls under the auspices of the District Information Technology Division. Recent initiatives include on and off site training with a focus on hands-on learning. Partnerships have been developed with training staff and outside vendors. District staff has a full range of times and dates to take advantage of district technology training. Peer to Peer partnerships in learning with in-house technology representatives is supported and celebrated. Teaching staff has the option of attending summer institutes provided by

colleges and universities. Support for attending conferences and workshops to further the knowledge base of district trainers and staff is accepted as necessary and important.

Our recently established Office of Technology Training and Integration offers a wide variety of meaningful and appropriate learning opportunities for all members of the district staff. Academic and business software programs have been the strong focus in district technology staff development initiatives. Research-based student programs along with effective and efficient teacher record keeping software has also been implemented. In order to use technology effectively, District staff is required to have basic PC competencies and a willingness to participate in ongoing technology training.

Looking to the future, we embrace the vision of our ability to continue to support the positive movement in the area of technology education for the staff. Continuing to systematically address the challenges of staff turnover rate, continuing changes in technology, and working within the constraints of limited time and funding is the challenge for all districts.

3.9 CURRENT TECHNOLOGY BUDGET ANALYSIS

3.9.1 Analysis of Past, Current, and Future Sources of Technology Funding

The Harrisburg School District IT Department receives a small portion of the District budget, with the majority of funding for technology coming from federal and state grants. Sources for the past technology plan included eRate, Students Achieving Standards, Educate America and Perkins grants. With the creation of the Grants Department within the past year, the District is pursuing more grants to improve the quality of education for all students. The renovation budgets cover infrastructure expenses for renovated buildings through eRate funding.

Currently, 36% of the technology budget is spent on hardware. This is expected to decrease significantly with the new technology plan. Over the past two years, there has been a shift in spending from hardware to software and staff development. As renovations are completed, and hardware is updated throughout the entire District, this shift will continue, allowing more funding to be allocated to the purchase of educational software and training of staff.

One area of concern is the allocation of funding to the building level. In past years, each school was given the same amount of money, regardless of technology needs. This has allowed some buildings to purchase additional hardware (printers, scanners) or software (NCS Learn licenses), while others are still updating their machines. Current management is addressing this issue.

Analyze Previous and Current Technology Budget and Expenditures Previous Year 2000

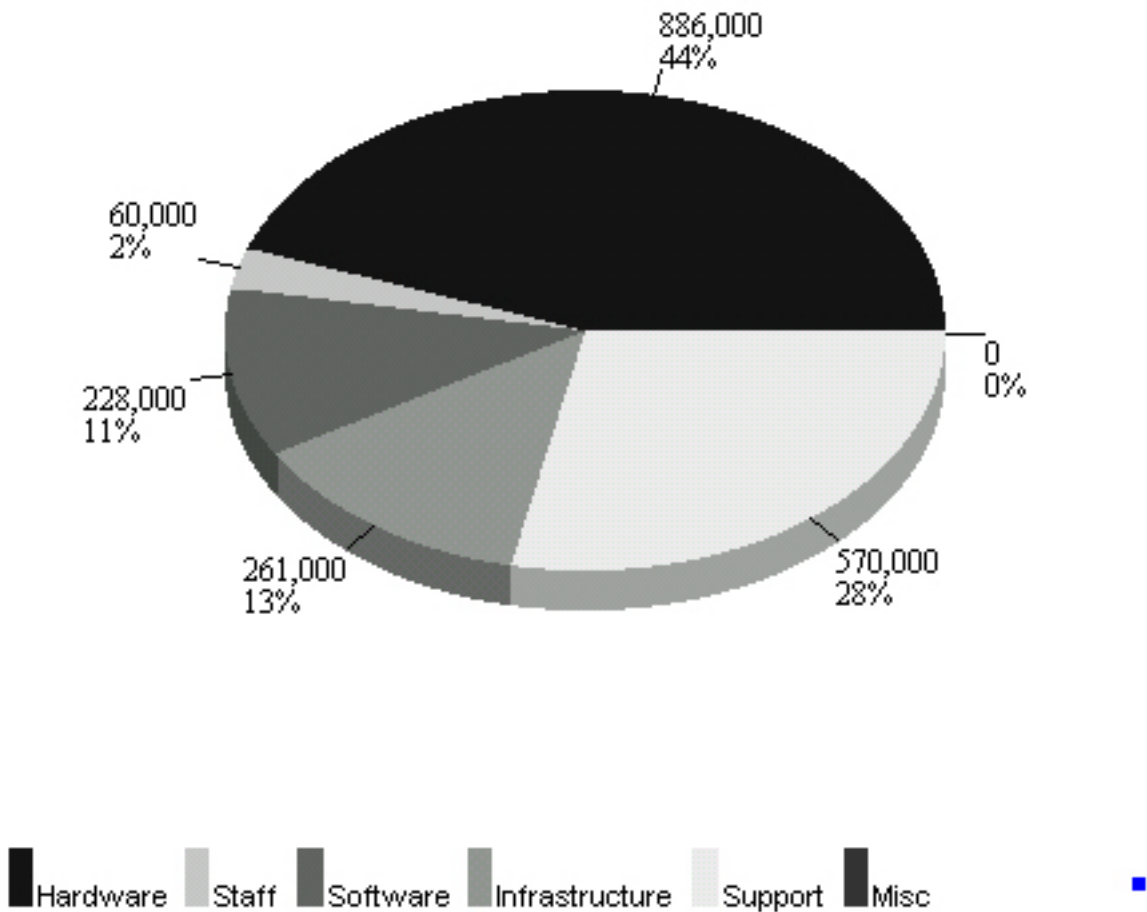
	Central or Dist. Office		Elementary School		Middle School		High School		Total	
	total	%	total	%	total	%	total	%	total	%
Hardware	\$257,000.00	54.68%	\$558,000.00	47.57%	\$18,000.00	11.61%	\$53,000.00	25.60%	\$886,000.00	44.19%
Software	\$36,000.00	7.66%	\$176,000.00	15.00%	\$7,000.00	4.52%	\$9,000.00	4.35%	\$228,000.00	11.37%
Infrastructure	\$70,000.00	14.89%	\$185,000.00	15.77%	\$3,000.00	1.94%	\$3,000.00	1.45%	\$261,000.00	13.02%
Staff Development	\$4,000.00	0.85%	\$44,000.00	3.75%	\$7,000.00	4.52%	\$5,000.00	2.42%	\$60,000.00	2.99%
Support Services	\$103,000.00	21.91%	\$210,000.00	17.90%	\$120,000.00	77.42%	\$137,000.00	66.18%	\$570,000.00	28.43%
Misc	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
TOTAL	\$470,000.00	100%	\$1,173,000.00	100%	\$155,000.00	100%	\$207,000.00	100%	\$2,005,000.00	100%

Current Year 2001

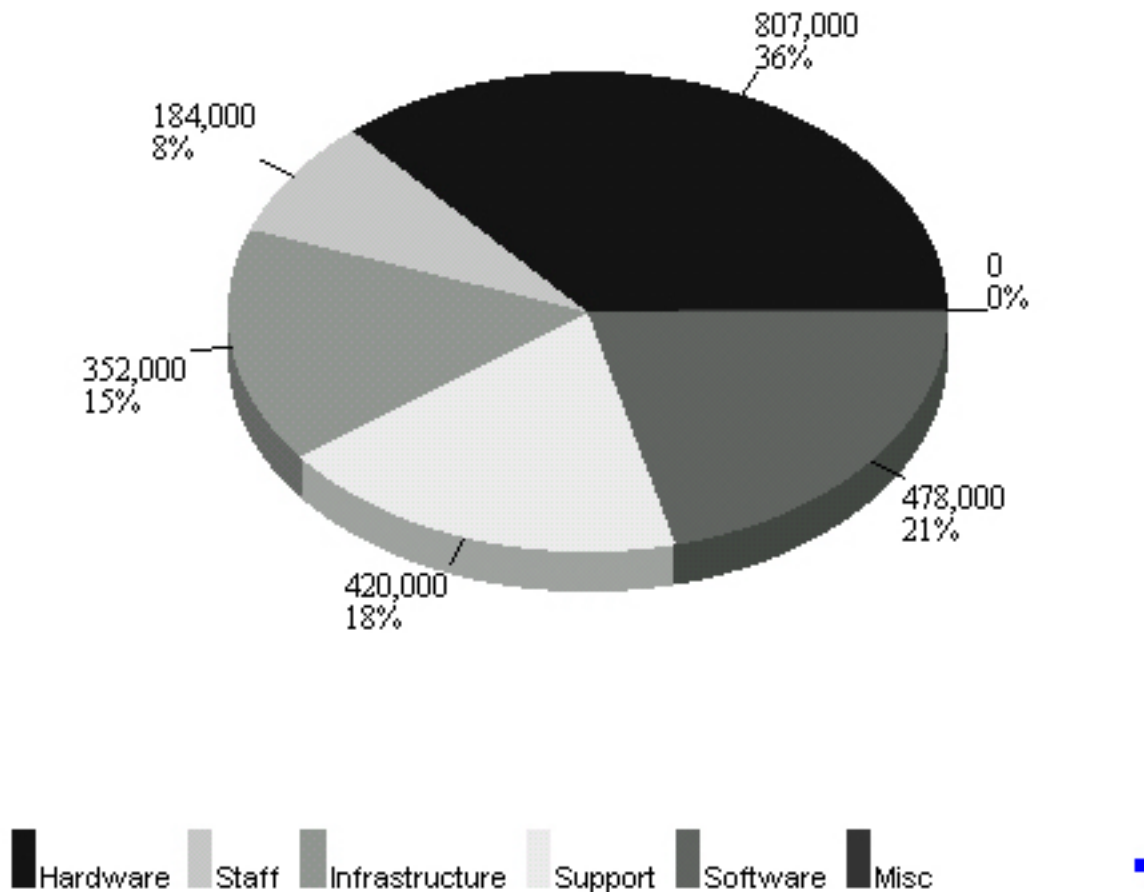
	Central or Dist. Office		Elementary School		Middle School		High School		Total	
	total	%	total	%	total	%	total	%	total	%
Hardware	\$274,000.00	50.37%	\$485,000.00	34.23%	\$8,000.00	6.25%	\$40,000.00	26.32%	\$807,000.00	36.01%
Software	\$63,000.00	11.58%	\$397,000.00	28.02%	\$9,000.00	7.03%	\$9,000.00	5.92%	\$478,000.00	21.33%

Infrastructure	\$105,000.00	19.30%	\$239,000.00	16.87%	\$4,000.00	3.13%	\$4,000.00	2.63%	\$352,000.00	15.71%
Staff Development	\$18,000.00	3.31%	\$144,000.00	10.16%	\$15,000.00	11.72%	\$7,000.00	4.61%	\$184,000.00	8.21%
Support Services	\$84,000.00	15.44%	\$152,000.00	10.73%	\$92,000.00	71.88%	\$92,000.00	60.53%	\$420,000.00	18.74%
Misc	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
TOTAL	\$544,000.00	100%	\$1,417,000.00	100%	\$128,000.00	100%	\$152,000.00	100%	\$2,241,000.00	100%

Pie Chart of Previous Year's Technology Budget and Recent Expenditures (in dollars)



Pie Chart of Current Year's Technology Budget and Recent Expenditures (in dollars)



Section 4 - Identify Strategic Goals & Objectives

4.1 CURRICULUM AND LEARNING

4.1.1 Curriculum and Learning Goals and Objectives

The District's goals and objectives for curriculum and learning will provide the following: technology tools to improve instructional activities; technology skills to facilitate critical thinking, problem solving, decision making and analytical skills; and technology to facilitate existing, advanced and accelerated curricular and academic programs. Students' education will be greatly affected by these goals. Curriculum based instructional systems will be used at all grade levels to improve student reading and math skills. Integration of technology into the academic curriculum will facilitate high level thinking skills as well as technology skills. To further enhance students' technology skills, the current technology curriculum will be revised. The inclusion of online courses and distance learning activities will broaden the educational opportunities for our students. The development of a digital student portfolio system will allow students to demonstrate academic skills and assist teachers in assessment and instructional decisions. Training for teaching staff is a crucial objective in achieving these goals. Besides the future expansion of the Technology Integration Department, partnerships with other educational institutions and businesses will be necessary to provide the necessary training for teaching staff.

Goals and Objectives for Curriculum and Learning

The District teaching staff will use a variety of technology tools to improve instructional

•

activities.

Associated Objectives:

- Implement an auditory processing system in grades 2-5 (FastForWord)



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Implement a curriculum based instructional system in grades 9-12.

•

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Expand existing curriculum based instructional system in grades K-8 (NCSLearn)

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

•

Associated Objectives:

- Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.

•

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4



- | | | | | |
|---|--|--------|--|--------|
| Year 1 | | Year 2 | | Year 3 |
| <ul style="list-style-type: none"> Expand the integration of technology in the curriculum and classroom. | | | | |



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			
The District will use technology to facilitate existing, advanced and accelerated curricular and academic programs.													

Associated Objectives:

- Provide additional educational opportunities beyond the traditional school boundaries through distance learning.

•

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Provide additional educational opportunities beyond the traditional school boundaries through online courses.

•

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.

timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			



4.2 ADMINISTRATION AND MANAGEMENT

4.2.1 Administration and Management Goals and Objectives

The District's goals and objectives for administration and management will: increase administrators' proficiency on District software applications to promote productivity; expand current administrative systems to support District daily operations; and use technology to analyze data, determine the impact of current educational initiatives, thus leading to data driven decision making.

By standardizing data entry and integrity, administrators will be able to make decisions using valid data. Valid data analysis will help administrators make instructional and professional development decisions for the District thus impacting our students' education. Training is needed on current District software applications, and new applications must be purchased or developed to meet the needs of extensive data analysis. The current student database system needs to be expanded to house additional student data, then training must take place so administrators can access and use the data.

Security, transportation, and facilities issues impact the educational environment for staff and students. By updating the current security system, our schools will become a safer place for students and staff. This will also increase the security of the technology equipment in the schools. A transportation management system will impact decisions on school boundaries and busing thus impacting students. Consolidating our facilities system will help effectively maintain a comfortable environment for students and staff. Additionally, the performance of technology equipment will be increased in a temperature-controlled environment.

Goals and Objectives for Administration and Management

- Increase Administrators' proficiency on District software applications to promote increased productivity.
- Associated Objectives:
- Develop standards for uniform data entry to ensure data integrity.



- timeline
- | | | | |
|--------|---|---|---|
| Q | Q | Q | Q |
| 1 | 2 | 3 | 4 |
| Year 1 | | | |

Q	Q	Q	Q
1	2	3	4
Year 2			

Q	Q	Q	Q
1	2	3	4
Year 3			
- Train Administrators on District software applications.



- timeline
- | | | | |
|--------|---|---|---|
| Q | Q | Q | Q |
| 1 | 2 | 3 | 4 |
| Year 1 | | | |

Q	Q	Q	Q
1	2	3	4
Year 2			

Q	Q	Q	Q
1	2	3	4
Year 3			
- Expand current administrative systems to support District daily operations.
- Associated Objectives:
- Design and create web-based database applications to enhance the support of district functions.



- timeline
- | | | | |
|--------|---|---|---|
| Q | Q | Q | Q |
| 1 | 2 | 3 | 4 |
| Year 1 | | | |

Q	Q	Q	Q
1	2	3	4
Year 2			

Q	Q	Q	Q
1	2	3	4
Year 3			
- Update the current security system to ensure safety in the schools.



- timeline
- | | | | |
|--------|---|---|---|
| Q | Q | Q | Q |
| 1 | 2 | 3 | 4 |
| Year 1 | | | |

Q	Q	Q	Q
1	2	3	4
Year 2			

Q	Q	Q	Q
1	2	3	4
Year 3			
- Implement a transportation management system.




- timeline
- | | | | |
|--------|---|---|---|
| Q | Q | Q | Q |
| 1 | 2 | 3 | 4 |
| Year 1 | | | |

Q	Q	Q	Q
1	2	3	4
Year 2			

Q	Q	Q	Q
1	2	3	4
Year 3			
- Consolidate the current facilities system to make uniform throughout the District.

timeline



Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			


Use technology to analyze data, determine the impact of current educational initiatives, and lead to data driven decision making.

Associated Objectives:

- Enable Administrators to utilize data to make decisions.

•

timeline




Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Train Administrators on the use of new modules and software available to access information.

•


timeline



Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Expand the current student database system to house additional student data.

timeline



Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			


Maintain support for District technology functions.

Associated Objectives:

- Maintain existing network (hardware and software) to support all District functions.

•

timeline




Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Maintain workstation functionality to provide necessary support of District functions.

•


timeline



Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- Maintain existing service agreements to support District technology functions.

timeline



Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4

- | | | | | |
|--------|--|--------|--|--------|
| Year 1 | | Year 2 | | Year 3 |
|--------|--|--------|--|--------|
- Maintain sufficient staffing levels to support District technology functions.



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

4.3 COMMUNICATIONS AND INFORMATION ACCESS

4.3.1 Communication and Information Access Goals and Objectives

The District's goals and objectives for communication and information access will provide the following: parents and district personnel access to necessary student information; the educational community access to educational resources; and improved communications between all members of the educational community.

Student learning will be improved by providing dial up accounts, email and technology resources as necessary for course work. Additional educational resources such as a homework hotline and web-based resources will provide students with 24 X 7 access to information to aid students' education. Partnering with educational institutions such as the State Library will greatly increase the research resources available to our students. Access to the above technology resources for students will support, enhance and facilitate the achievement of state academic standards. As part of our technology plan, communication with parents will be greatly increased. Through the use of the telecommunications system, parents will be notified when students are absent, be able to check on students' homework and be able to leave voice messages for all staff. Using the web, parents will have access to student's grades, attendance, discipline, and homework. Also district and school events and announcements will be available on the web site for parents and the community.

The district staff will be able to access their email, voice mail, and district information on the web site from within the district as well as remote locations on a 24 X 7 basis. This will improve communication among educational stakeholders and enhance the teaching process.

Finally, the development of web based databases and the upgrading of our web based student information system will aid in the decision making process and policy formation. The data from these systems will provide the necessary information for making and justifying education decisions for reform. Penn State University will be a valuable resource in utilizing our current student and financial database effectively and then analyzing the data to make data-driven decisions.

Goals and Objectives for Communication and Information Access

- The District will provide parents and district personnel access to necessary student information.
-

Associated Objectives:

- The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- The District will provide parents access to students' grades, attendance and discipline through web-based software applications.
-

timeline



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Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- The District will use the telecommunications system to contact parents via voice messages when students are absent.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

The District will provide the educational community access to educational resources.

Associated Objectives:

- Provide students with out of school day access to technology.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- Achieve a ratio of one computer per student.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- The District will provide remote access for students to use technology resources as needed for course work.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- The District will provide a homework hotline, for students and parents, via the telecommunication systems.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- The District will provide web-based research resources to the educational community.



timeline

Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1	2	3	4	1	2	3	4	1	2	3	4
Year 1				Year 2				Year 3			

- The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

The District will improve communications between all members of the educational community.

Associated Objectives:

- The District will provide necessary District personnel with the ability to connect from remote locations to the district network.

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timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community.

•



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

- The District will provide e-mail access to students as necessary for course work.



timeline

Q	Q	Q	Q		Q	Q	Q	Q		Q	Q	Q	Q
1	2	3	4		1	2	3	4		1	2	3	4
Year 1					Year 2					Year 3			

Section 5 - Create Action Steps for Objectives

5.1 CURRICULUM AND LEARNING TECHNOLOGY ACTION STEPS

5.1.1 Action Steps for Curriculum and Learning Technology Objectives:

Goal: The District teaching staff will use a variety of technology tools to improve instructional activities.

Associated Objectives:

Expand existing curriculum based instructional system in grades K-8 (NCSLearn)

Action Steps:

Hardware

Evaluate current hardware to see if match system requirements for NCS Learn workstation upgrade.

Upgrade or purchase/replace hardware to match NCS Learn system requirements.

Network

Purchase additional servers so that have one NCS Learn server for each school.

Upgrade existing NCS Learn server software to the latest version.

Purchase and install NCS Learn server software on new servers.

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.

Software

Purchase additional NCS Learn workstation licenses to work towards a goal of 1 license for every 5 students.

Install updated version of NCS workstation software on licensed machines within the District.

Staff Development

Train teaching staff on the upgraded version of NCS Learn.

Train IT Integration Division on upgraded version of NCS Learn.

Technology Staffing

Hire Technology Integrators (tentative goal - six).

End User

Provide support to teachers and students on the new version of NCS Learn.

Implement a curriculum based instructional system in grades 9-12.

Action Steps:

Hardware

Survey hardware in desired locations within high school to determine if meet the minimum requirements of the chosen software.

Upgrade/purchase machines to support the selected software program (9-12 curriculum instructional software).

Network

If needed, purchase server(s) to house the chosen software package (9-12 curriculum based instructional software)

Software

Research available options for 9th-12th grade instructional systems.

Purchase software licenses for chosen system.

Install software in classrooms/labs at the high school.

Staff Development

Train teaching staff on use of the software package, including how to integrate it into their daily lesson plans.

Technology Staffing

Hire Technology Integrators (tentative goal - six).

Implement an auditory processing system in grades 2-5 (FastForWord)

Action Steps:

Hardware

Upgrade or purchase hardware for classrooms that do not have enough machines to support the number of licenses allocated for the classroom. (auditory processing system)

Survey hardware in classrooms to determine if match system requirements for Fast ForWord program.

Install additional machines in classrooms to support the Fast ForWord program.

Network

Purchase/install additional networking equipment to support additional machines in non-renovated buildings. (i.e. network jacks, hubs, electrical outlets)

Software

Install software in 2nd-5th grade classrooms.

Purchase software licenses for Fast ForWord program.

Staff Development

Train teachers on use of the Auditory Processing software package.

Technology Staffing

Hire Technology Integrators (tentative goal - six).

Goal: The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

Associated Objectives:

Expand the integration of technology in the curriculum and classroom.

Action Steps:

Staff Development

Send integrators to workshops/seminars to acquire new methods of integrating technology into the curriculum.

Hold training workshops with teachers to show how to use technology in the different subject areas/grade levels.

Through PTO/PTA, bring parents into the classroom to work with students in the area of technology.

Technology Staffing

Hire Technology Integrators (tentative goal - six).

End User

Provide support to teachers as they integrate technology into their curriculums.

Evaluate current technology and academic curriculums, and revise to include technology standards.

Develop and maintain a software and technology literature library.

Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.

Action Steps:

Staff Development

Work with Harrisburg Area Community College to provide additional classes to teaching staff.

Hire substitutes so teachers can attend technology training.

Determine appropriate training for District positions.

Develop training classes for new courses and add courses to the training schedule.

Offer training to District personnel.

Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)

End User

Develop and maintain a software and technology literature library.

Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.

Action Steps:

Software

Evaluate prepackaged curriculums from vendors and curriculums from other districts to assist in revisions/creation of technology curriculum.

Technology Staffing

Determine staffing needs for new curriculum and hire additional teachers if necessary.

End User

Assist in implementing new curriculum.

Communicate new curriculum information to teaching staff.

Miscellaneous

Create new or review current curriculum for each grade level and make necessary revisions based on PDE standards and available technology.

Create a committee for each grade level comprised of teachers, and representatives from Academic Services and Information Technology.

Investigate/develop partnerships with EMO, Avaya, and other local businesses to provide students with internships.

Investigate/develop partnership with the State Library to provide additional research tools to students.

Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.

Action Steps:

Hardware

Purchase additional hardware (digital still and video cameras, scanners, etc.) to support the portfolio system.

Network

Purchase servers to house portfolio software and data.

Software

Purchase/develop software to house portfolio data via the intranet/internet.

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)

Develop custom screen(s) in student/financial management systems to house additional data.

Staff Development

Train IT on use/support of portfolio systems.

Train users (teachers/students) on use of the portfolio systems (how to

add/update information, etc.).

Miscellaneous

Develop Acceptable Use Policy on use of portfolio system(s).

Research options to provide portfolio system to students/parents/teachers.

Goal: The District will use technology to facilitate existing, advanced and accelerated curricular and academic programs.

Associated Objectives:

Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.

Action Steps:

Hardware

Purchase/upgrade hardware to support new District initiatives.

Network

Install/upgrade network components to support new District initiatives.

Software

Purchase software to support District initiatives (curriculum needs, etc).

Staff Development

Offer training to District personnel.

End User

Determine the technological needs of new District initiatives as they are defined.

Provide additional educational opportunities beyond the traditional school boundaries through online courses.

Action Steps:

Hardware

purchase necessary laptops, scanners, and printers for students and teachers involved in online courses

Staff Development

provide necessary training for students and teachers on online course software
train IT staff on supporting online course software support

Miscellaneous

Join and maintain membership in Pennsylvania Virtual Academy Coalition.

Fund supplemental contracts for writing and teaching online courses.

research additional online courses for students

Provide additional educational opportunities beyond the traditional school boundaries through distance learning.

Action Steps:

Hardware

upgrade or replace existing Distance Learning equipment (carts and MCU)

Network

configure new Distance Learning equipment on network

Software

install necessary software on Distance Learning equipment (carts and MCU)

Staff Development

train teaching staff on how to operate Distance Learning equipment

train IT staff on supporting new Distance Learning equipment

End User

maintain service agreement for Distance Learning equipment
Miscellaneous

maintain PDL membership (Partners in Distance Learning)
investigate possible virtual fieldtrips and courses for students

5.2 ADMINISTRATION AND MANAGEMENT TECHNOLOGY ACTION STEPS

5.2.1 Action Steps for Administration and Management Technology Objectives:

Goal: Increase Administrators' proficiency on District software applications to promote increased productivity.

Associated Objectives:

Train Administrators on District software applications.

Action Steps:

Staff Development

Determine appropriate training for District positions.
Develop training classes for new courses and add courses to the training schedule.
Offer training to District personnel.

Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)

End User

Develop and maintain a software and technology literature library.
Develop standards for uniform data entry to ensure data integrity.

Action Steps:

Software

Run periodic data integrity checks.
Convert existing data to match new policy standards.

End User

Communicate data standards to appropriate personnel.

Miscellaneous

Form data standards committee.
Write district policy on data entry. Policy should cover field definitions and formats for each field.

Goal: Expand current administrative systems to support District daily operations.

Associated Objectives:

Consolidate the current facilities system to make uniform throughout the District.

Action Steps:

Hardware

Purchase hardware for facilities system.
Install hardware in buildings for new facilities system.

Software

Purchase facilities system.
Install/implement new facilities system.

Staff Development

Train necessary personnel on use of facilities system.

Miscellaneous

Evaluate current facilities systems and research options to consolidate into one system.

Implement a transportation management system.

Action Steps:

Software

Implement transportation system.

Purchase transportation management system.

Staff Development

Train necessary administrative staff on use of transportation management system.

Miscellaneous

Research options for transportation management system.

Update the current security system to ensure safety in the schools.

Action Steps:

Hardware

Replace outdated/broken security equipment.

Maintain security equipment.

Staff Development

Train security staff on use of equipment and security plan.

Technology Staffing

Hire Security Systems Network Administrator (See Salaries for Technology Network Division)

Miscellaneous

Evaluate security equipment and problem areas.

Develop revised security plan.

Implement new security plan throughout the District.

Design and create web-based database applications to enhance the support of district functions.

Action Steps:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.

Purchase two servers to house web-based database applications.

Install Microsoft 2000 Server and other necessary software on servers (IIS, SQL and web-based database application software).

Software

Develop and maintain web-based applications for District use.

Purchase necessary server software (Windows 2000, IIS, SQL, web-based database application).

Staff Development

Send IT personnel for training on Microsoft 2000 Server, IIS, ASP, SQL and web-based database application.

Train necessary District personnel on the use of web-based applications.

Goal: Use technology to analyze data, determine the impact of current educational initiatives, and lead to data driven decision making.

Associated Objectives:

Expand the current student database system to house additional student data.

Action Steps:

Software

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)
Develop custom screen(s) in student/financial management systems to house additional data.

End User

Meet with appropriate Administrators and determine necessary data to be housed on the student information system.
Train Administrators on the use of new modules and software available to access information.

Action Steps:

Staff Development

Train administrators on new custom screens in student information system.
Offer training to District personnel.

Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)
Enable Administrators to utilize data to make decisions.

Action Steps:

Software

Write custom reports for Administrators.
Review and purchase new software to simplify data analysis.
Maintain necessary user access to appropriate applications.

Staff Development

Train administrators on how to access and run new reports and use new software applications.

End User

Determine necessary reports to be developed to better support administrative staff.

Goal: Maintain support for District technology functions.

Associated Objectives:

Maintain sufficient staffing levels to support District technology functions.

Action Steps:

Technology Staffing

Maintain staffing levels for Technology Networking Division
Review workloads of current staff and hire additional staff as needed to continue to provide a high level of technical support to the entire District.
Maintain staffing levels for Technology Integration Division (Trainers and Integrators)
Maintain staffing levels for Technology Operations Division (Database Administrators and Daily Operations)
Maintain Director of Information Technology and Administrative Assistant

Maintain existing service agreements to support District technology functions.

Action Steps:

End User

Maintain phone service

Maintain contract with Internet Service Provider.

Maintain service agreements to provide additional technology support on major projects.

Maintain service agreement with Avaya to provide additional network support on their equipment.

Maintain service agreement for student data/financial accounting system.

Maintain workstation functionality to provide necessary support of District functions.

Action Steps:

Hardware

Repair/upgrade workstation hardware to ensure the ability to support District software.

Software

Upgrade the OS on all machines within the District to make uniform throughout the entire District.

Research option of upgrading existing software packages to the latest versions.

Purchase software to support District initiatives (curriculum needs, etc).

Maintain existing network (hardware and software) to support all District functions.

Action Steps:

Network

Upgrade and maintain the existing fiber backbone. Upgrade from ATM to Gigabit Ethernet.

Upgrade and maintain internal connectivity within the buildings (switches, hubs, routers, wireless hubs, network jacks, etc).

Purchase equipment to reduce network downtime and protect network equipment (UPS, etc.).

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.

5.3 COMMUNICATIONS AND INFORMATION ACCESS TECHNOLOGY ACTION STEPS

5.3.1 Action Steps for Communications and Information Access Technology Objectives:

Goal: The District will provide parents and district personnel access to necessary student information.

Associated Objectives:

The District will use the telecommunications system to contact parents via voice messages when students are absent.

Action Steps:

Network

Install Parent Notification Module for PBX system.

Maintain and upgrade the PBX system, both hardware and software.

Software

Maintain class lists within Pentamation system.

Maintain parent phone numbers in the Pentamation system.

Ensure that attendance is completed at all buildings by a certain time each day.

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)

Miscellaneous

Develop and implement interface module between Pentamation System and Parent Notification Module.

The District will provide parents access to students' grades, attendance and discipline through web-based software applications.

Action Steps:

Network

Install Parent Access Module on Pentamation server.

Software

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)

Staff Development

Train IT personnel to support Parent Access Module.

Train parents and/or building level staff on use of the Parent Access Module.

End User

Publicize Parent Access Module to parents within the District.

Miscellaneous

Maintain user accounts and security on Parent Access Module.

The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.

Action Steps:

Software

Replace GradeBook software with Teacher Workstation software.

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)

Staff Development

Train teachers on Teacher Workstation software.

Train necessary District personnel on Pentamation System.

End User

Maintain service agreement for student data/financial accounting system.

Goal: The District will provide the educational community access to educational resources.

Associated Objectives:

The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.

Action Steps:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.

Purchase two servers to house web-based database applications.

Install Microsoft 2000 Server and other necessary software on servers (IIS, SQL and web-based database application software).

Software

Purchase necessary server software (Windows 2000, IIS, SQL, web-based database application).

Staff Development

Train authorized users on how to post information to the District website.

End User

Develop procedures and policies for posting information on the District website.

Publicize to the educational community what information is available on the web, and how to access it.

Miscellaneous

Maintain user accounts for Web Server.

Maintain security to confidential web pages.

The District will provide web-based research resources to the educational community.

Action Steps:

Network

Create and maintain education links page on District website.

End User

Develop procedure for submitting educational links to the District website.

Provide access to online research databases.

Miscellaneous

Investigate potential partnerships with educational institutions for providing educational resources.

The District will provide a homework hotline, for students and parents, via the telecommunication systems.

Action Steps:

Network

Roll out homework hotline to all schools within the District.

Staff Development

Train IT staff on support of homework hotline.

Train teachers on how to setup and use the homework hotline.

End User

Publicize to students and parents how to access the homework hotline.

Miscellaneous

Maintain user accounts and mailboxes on the telecommunications system.

The District will provide remote access for students to use technology resources as needed for course work.

Action Steps:

Network

Purchase and install any necessary equipment to support student remote access.

Software

Install any necessary software to support student remote access.

Create and maintain student accounts for remote access.

Staff Development

Train students on how to access network resources remotely.

Train teachers on how to support student remote access.

End User

Develop policy on student usage through remote access.

Miscellaneous

Research options to allow students to connect to network resources from remote locations.

Determine which students need remote access to network resources.

Achieve a ratio of one computer per student.

Action Steps:

Hardware

Move machines from building areas under renovation to other buildings to work towards the 1:1 ratio.

As renovations are completed, purchase new computers to achieve the 1:1 ratio within the renovated building.

Replace student machines with new machines, as they become outdated.

If necessary, purchase additional machines for previously renovated buildings in order to achieve the 1:1 ratio within that building.

Provide students in grades 8-12 with laptops to support "education anytime, anywhere" district initiative.

Miscellaneous

Survey current number of student machines in the classrooms and compare to the number of students within each building.

Provide students with out of school day access to technology.

Action Steps:

Hardware

Provide students in grades 8-12 with laptops to support "education anytime, anywhere" district initiative.

Technology Staffing

Pay overtime/supplementals to employees to supervise after school programs and/or extended library hours.

Miscellaneous

Research option of extending library hours to include weekends/evenings.

Research and implement after school programs that give students access to technology.

Goal: The District will improve communications between all members of the educational community.

Associated Objectives:

The District will provide e-mail access to students as necessary for course work.

Action Steps:

Software

Implement e-mail system for students.

Staff Development

Train school level staff how to maintain student e-mail accounts.

End User

Develop policy on student e-mail usage.

Miscellaneous

Research options for e-mail service for students

The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.

Action Steps:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.

Software

Research, evaluate and possibly upgrade GroupWise software on server.

Staff Development

Continue to offer beginning, intermediate and advanced level training on e-mail system.

Miscellaneous

Maintain user accounts on GroupWise system.

The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community.

Action Steps:

Network

Maintain and upgrade the PBX system, both hardware and software.

Staff Development

Train district personnel on use of the voice mail system.

Miscellaneous

Maintain user accounts and mailboxes on the telecommunications system.

The District will provide necessary District personnel with the ability to connect from remote locations to the district network.

Action Steps:

Network

Upgrade from T1 line to multiple T3 lines to handle additional dial-up lines.

Research and implement options to allow personnel to connect from remote locations 24 X 7 (wireless, VPN, dial-up)

Staff Development

Train personnel on dial-up access.

Miscellaneous

Maintain dial-up accounts for necessary district personnel.

Section 6 - Technology Solution Design and Action Plans

6.1 DETERMINE HARDWARE REQUIREMENTS AND ACTION PLAN

6.1.1 Hardware Action Plan

Hardware Action Steps	Co st Ye ar 1	Co st Ye ar 2	Co st Ye ar 3	3- Year Est. Total
Action Step: Repair/upgrade workstation hardware to ensure the ability to support District software. Action: upgrade Level: district-wide Item: student workstations Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain workstation functionality to provide necessary support of District functions.	\$68 00	\$74 80	\$82 20	\$225 00

Action Step: Upgrade or purchase hardware for classrooms that do not have enough machines to support the number of licenses allocated for the classroom. (auditory processing system) Action: purchase Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: State Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$50 000	\$30 000	\$10 000	\$900 00
Action Step: Survey hardware in desired locations within high school to determine if meet the minimum requirements of the chosen software. Action: purchase Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.	\$0	\$0	\$0	\$0
Action Step: Evaluate current hardware to see if match system requirements for NCS Learn workstation upgrade. Action: configure Level: district-wide Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$0	\$0	\$0
Action Step: Upgrade or purchase/replace hardware to match NCS Learn system requirements. Action: upgrade Level: district-wide Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe	\$10 000	\$10 000	\$10 000	\$300 00

Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)				
Action Step: Purchase/upgrade hardware to support new District initiatives. Action: upgrade Level: district-wide Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.	\$12 000 0	\$80 000	\$40 000	\$240 000
Action Step: Move machines from building areas under renovation to other buildings to work towards the 1:1 ratio. Action: configure Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 338 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives Achieve a ratio of one computer per student.	\$10 000	\$10 000	\$10 000	\$300 00
Action Step: As renovations are completed, purchase new computers to achieve the 1:1 ratio within the renovated building. Action: purchase Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: Local Bonds Secondary: District Categorical Funds Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives Achieve a ratio of one computer per student.	\$45 000 0	\$80 000 0	\$10 000 00	\$225 0000
Action Step: purchase necessary laptops, scanners, and printers for students and teachers involved in online courses	\$56 000	\$23 000	\$0	\$790 00

Action: purchase Level: high school Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: Federal Grants Secondary: State Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.				
Action Step: Replace student machines with new machines, as they become outdated. Action: replace Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives Achieve a ratio of one computer per student.	\$12 200 0	\$12 200 0	\$12 200 0	\$366 000
Action Step: If necessary, purchase additional machines for previously renovated buildings in order to achieve the 1:1 ratio within that building. Action: purchase Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: State Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives Achieve a ratio of one computer per student.	\$10 000 0	\$10 000 0	\$10 000 0	\$300 000
Action Step: Replace outdated/broken security equipment. Action: replace Level: district-wide Item: AV/TV equipment (i.e., VCR, DVD) Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Thom Johnson Primary: State Grants Secondary: District Categorical Funds Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives	\$40 000	\$10 000	\$80 00	\$580 00

Update the current security system to ensure safety in the schools.				
Action Step: Maintain security equipment. Action: configure Level: district-wide Item: AV/TV equipment (i.e., VCR, DVD) Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Thom Johnson Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.	\$0	\$0	\$0	\$0
Action Step: Survey hardware in classrooms to determine if match system requirements for Fast ForWord program. Action: acquire Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Doug Trimiar Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$0	\$0	\$0	\$0
Action Step: Install additional machines in classrooms to support the Fast ForWord program. Action: purchase Level: classroom Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Doug Trimiar Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$0	\$0	\$0	\$0
Action Step: Upgrade/purchase machines to support the selected software program (9-12 curriculum instructional software). Action: upgrade Level: classroom Item: student workstations Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe Primary: State Grants	\$27 000	\$27 000	\$27 000	\$810 00

Secondary: District Categorical Funds Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.				
Action Step: upgrade or replace existing Distance Learning equipment (carts and MCU) Action: purchase Level: district-wide Item: multimedia equipment Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Julie Lehmer Primary: Federal Grants Secondary: None Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.	\$68 000	\$0	\$0	\$680 00
Action Step: Purchase hardware for facilities system. Action: purchase Level: district-wide Item: mini-/mainframe computers Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 2 Leadership: Tom Curtis Primary: District Categorical Funds Secondary: None Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.	\$25 000	\$0	\$0	\$250 00
Action Step: Install hardware in buildings for new facilities system. Action: configure Level: district-wide Item: mini-/mainframe computers Start Date: Year 1 - Quarter 3 End Date: Year 1 - Quarter 3 Leadership: Tim Curtis Primary: District Categorical Funds Secondary: None Budget Code: 348 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.	\$80 00	\$0	\$0	\$800 0
Action Step: Purchase additional hardware (digital still and video camers, scanners, etc.) to support the portfolio system. Action: purchase Level: district-wide	\$58 000	\$29 000	\$29 000	\$116 000

Item: peripherals (i.e.,printers,scanners,etc.) Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: State Grants Secondary: Federal Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.				
Action Step: Provide students in grades 8-12 with laptops to support "education anytime, anywhere" district initiative. Action: purchase Level: district-wide Item: student workstations Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 758 Est. Unit Cost: 1500 Budget Note: Objectives: Communication and Information Access Objectives Provide students with out of school day access to technology. Achieve a ratio of one computer per student.	\$94 650 0	\$13 785 00	\$14 445 00	\$376 9500

6.2 DETERMINE NETWORK REQUIREMENTS AND ACTION PLAN

6.2.1 Network Action Plan

Network Action Steps	Co st Ye ar 1	Co st Ye ar 2	Co st Ye ar 3	3- Year Est. Total
Action Step: Install Parent Notification Module for PBX system. Action: install Level: district-wide Item: phone/voice mail services Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 3 Leadership: Holly Worful Primary: Vendor Contributions Secondary: None Budget Code: 348 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent.	\$30 00	\$0	\$0	\$3000
Action Step: Install Parent Access Module on Pentamation server. Action: install Level: district-wide Item: wide-area network services Start Date: Year 1 - Quarter 1	\$10 00	\$0	\$0	\$1000

End Date: Year 1 - Quarter 3 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 348 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide parents access to students' grades, attendance and discipline through web-based software applications.				
Action Step: Create and maintain education links page on District website. Action: upgrade Level: district-wide Item: communications servers Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide web-based research resources to the educational community.	\$0	\$0	\$0	\$0
Action Step: Upgrade from T1 line to multiple T3 lines to handle additional dial-up lines. Action: acquire new Level: district-wide Item: communications lines, satellite/ISP service Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Brett Henry Primary: Federal Grants Secondary: None Budget Code: 448 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide necessary District personnel with the ability to connect from remote locations to the district network.	\$36 000	\$36 000	\$36 000	\$1080 00
Action Step: Research and implement options to allow personnel to connect from remote locations 24 X 7 (wireless, VPN, dial-up) Action: upgrade Level: district-wide Item: wide-area network services Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: None Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide necessary District personnel with the	\$23 200 0	\$0	\$0	\$2320 00

ability to connect from remote locations to the district network.				
Action Step: Roll out homework hotline to all schools within the District. Action: install Level: district-wide Item: phone/voice mail services Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Holly Worful Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide a homework hotline, for students and parents, via the telecommunication systems.	\$0	\$0	\$0	\$0
Action Step: Purchase and install any necessary equipment to support student remote access. Action: install Level: district-wide Item: wide-area network equipment Start Date: Year 1 - Quarter 3 End Date: Year 1 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: None Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.	\$42 000	\$0	\$0	\$4200 0
Action Step: Purchase/install additional networking equipment to support additional machines in non-renovated buildings. (i.e. network jacks, hubs, electrical outlets) Action: install Level: classroom Item: building network equipment Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett henry Primary: Federal Grants Secondary: None Budget Code: 768 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$48 000 00	\$43 000 00	\$18 000 00	\$1090 0000
Action Step: If needed, purchase server(s) to house the chosen software package (9-12 curriculum based instructional software) Action: purchase Level: high school Item: network servers Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe	\$84 000	\$0	\$84 000	\$1680 00

Primary: State Grants Secondary: Federal Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.				
Action Step: Purchase additional servers so that have one NCS Learn server for each school. Action: purchase Level: district-wide Item: network servers Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: State Grants Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$44 000	\$0	\$0	\$4400 0
Action Step: Upgrade existing NCS Learn server software to the latest version. Action: upgrade Level: administrative Item: network servers Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: State Grants Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$22 200 0	\$0	\$0	\$2220 00
Action Step: Purchase and install NCS Learn server software on new servers. Action: install Level: administrative Item: network servers Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$0	\$0	\$0
Action Step: Install/upgrade network components to support new	\$32 000	\$28 000	\$11 000	\$7100 000

District initiatives. Action: replace Level: district-wide Item: wide-area network equipment Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: None Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.	00	00	00	
Action Step: configure new Distance Learning equipment on network Action: install Level: district-wide Item: distance learning equipment Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 4 Leadership: Julie Lehmer Primary: Vendor Contributions Secondary: None Budget Code: 328 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.	\$12 000	\$0	\$0	\$1200 0
Action Step: Purchase servers to house portfolio software and data. Action: purchase Level: administrative Item: network servers Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: State Grants Secondary: District Categorical Funds Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$60 000	\$18 00	\$18 00	\$6360 0
Action Step: Upgrade and maintain the existing fiber backbone. Upgrade from ATM to Gigabit Ethernet. Action: upgrade Level: district-wide Item: wide-area network equipment Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Vendor Contributions Secondary: District Categorical Funds Budget Code: 768	\$38 000 00	\$24 700 0	\$24 700 0	\$4294 000

Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing network (hardware and software) to support all District functions.				
Action Step: Upgrade and maintain internal connectivity within the buildings (switches, hubs, routers, wireless hubs, network jacks, etc). Action: upgrade Level: district-wide Item: building network equipment Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing network (hardware and software) to support all District functions.	\$12 000	\$12 000	\$12 000	\$3600 0
Action Step: Purchase equipment to reduce network downtime and protect network equipment (UPS, etc.). Action: purchase Level: district-wide Item: building network equipment Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: None Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing network (hardware and software) to support all District functions.	\$90 000 0	\$0	\$0	\$9000 00
Action Step: Maintain and upgrade the PBX system, both hardware and software. Action: upgrade Level: administrative Item: phone/voice mail services Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Holly Worful Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objectives: Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent. The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community.	\$10 500 0	\$10 500 0	\$10 500 0	\$3150 00
Action Step: Purchase two servers to house web-based database	\$19 000	\$0	\$0	\$1900 0

applications. Action: purchase Level: administrative Item: communications servers Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Julie Lehmer Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 758 Est. Unit Cost: 0 Budget Note: Objectives: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions. Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.				
Action Step: Install Microsoft 2000 Server and other necessary software on servers (IIS, SQL and web-based database application software). Action: install Level: administrative Item: communications servers Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 2 Leadership: Julie Lehmer Primary: Vendor Contributions Secondary: District Categorical Funds Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objectives: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions. Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.	\$11 000	\$0	\$0	\$1100 0
Action Step: Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6. Action: upgrade Level: administrative Item: network servers Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objectives: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$60 00	\$10 00	\$10 00	\$8000

<p>Administration and Management Objectives Maintain existing network (hardware and software) to support all District functions. Design and create web-based database applications to enhance the support of district functions.</p> <p>Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website. The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.</p>				

6.3 DETERMINE FACILITIES REQUIREMENTS AND ACTION PLAN

6.3.1 Facilities Action Plan

Facilities Action Steps	Cost Year 1	Cost Year 2	Cost Year 3	3-Year Est. Total
Action Step: Action: Level: Item: Start Date: End Date: Leadership: Primary: Secondary: Budget Code: Est. Unit Cost: Budget Note: Objectives:	\$	\$	\$	\$

6.4 DETERMINE SOFTWARE REQUIREMENTS AND ACTION PLAN

6.4.1 Software Action Plan

Software Action Steps	Co st Ye ar 1	Co st Ye ar 2	Co st Ye ar 3	3- Year Est. Total
Action Step: Implement transportation system. Action: upgrade Level: administrative Item: transportation system Start Date: Year 2 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Bill Gretton Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Implement a transportation management system.	\$0	\$0	\$1200	\$1200
Action Step: Research, evaluate and possibly upgrade GroupWise software on server. Action: upgrade Level: district-wide Item: office automation software	\$0	\$0	\$6200	\$6200

Start Date: Year 3 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.				
Action Step: Replace GradeBook software with Teacher Workstation software. Action: aquire license Level: district-wide Item: office automation software Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.	\$11 200	\$0	\$0	\$1120 0
Action Step: Purchase necessary server software (Windows 2000, IIS, SQL, web-based database application). Action: aquire license Level: administrative Item: web management system Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Lehmer Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objectives: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions. Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.	\$41 000	\$15 000	\$15 000	\$7100 0
Action Step: Install any necessary software to support student remote access. Action: aquire license Level: district-wide Item: operating system software Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Vendor Contributions	\$18 00	\$18 00	\$18 00	\$5400

Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.				
Action Step: Create and maintain student accounts for remote access. Action: upgrade Level: district-wide Item: instructional software Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.	\$0	\$0	\$0	\$0
Action Step: Run periodic data integrity checks. Action: upgrade Level: administrative Item: office automation software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Develop standards for uniform data entry to ensure data integrity.	\$0	\$0	\$0	\$0
Action Step: Convert existing data to match new policy standards. Action: upgrade Level: administrative Item: relational database system Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Develop standards for uniform data entry to ensure data integrity.	\$0	\$0	\$0	\$0
Action Step: Write custom reports for Administrators. Action: upgrade Level: administrative Item: decision support system	\$0	\$0	\$0	\$0

Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Enable Administrators to utilize data to make decisions.				
Action Step: Review and purchase new software to simplify data analysis. Action: aquire license Level: administrative Item: decision support system Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: State Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Enable Administrators to utilize data to make decisions.	\$0	\$4200	\$100	\$4300
Action Step: Maintain necessary user access to appropriate applications. Action: upgrade Level: administrative Item: decision support system Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Enable Administrators to utilize data to make decisions.	\$0	\$0	\$0	\$0
Action Step: Purchase facilities system. Action: subscribe Level: administrative Item: maintenance/building management system Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 2 Leadership: Tim Curtis Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.	\$3200	\$0	\$0	\$3200
Action Step: Install/implement new facilities system. Action: subscribe	\$0	\$160	\$160	\$320

Level: district-wide Item: maintenance/building management system Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.				
Action Step: Purchase transportation management system. Action: acquire license Level: administrative Item: transportation system Start Date: Year 2 - Quarter 1 End Date: Year 2 - Quarter 1 Leadership: Bill Gretton Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Implement a transportation management system.	\$0	\$42 000	\$0	\$4200 0
Action Step: Develop and maintain web-based applications for District use. Action: upgrade Level: district-wide Item: office automation software Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions.	\$0	\$0	\$0	\$0
Action Step: Install software in 2nd-5th grade classrooms. Action: upgrade Level: classroom Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Doug Trimiar Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$0	\$0	\$0	\$0

Action Step: Purchase software licenses for Fast ForWord program. Action: aquire license Level: classroom Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Mary Nardo Primary: District Categorical Funds Secondary: State Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)	\$15 200 0	\$15 200 0	\$15 200 0	\$4560 00
Action Step: Research available options for 9th-12th grade instructional systems. Action: upgrade Level: high school Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Academic Services Personnel Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.	\$0	\$0	\$0	\$0
Action Step: Purchase software licenses for chosen system. Action: aquire license Level: high school Item: instructional software Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 3 Leadership: Donita Rowe Primary: State Grants Secondary: District Categorical Funds Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.	\$62 000	\$62 000	\$62 000	\$1860 00
Action Step: Install software in classrooms/labs at the high school. Action: upgrade Level: classroom Item: instructional software Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel	\$0	\$0	\$0	\$0

Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.				
Action Step: Purchase additional NCS Learn workstation licenses to work towards a goal of 1 license for every 5 students. Action: expand license Level: district-wide Item: instructional software Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe Primary: State Grants Secondary: District Categorical Funds Budget Code: 618 Est. Unit Cost: 1900 Budget Note: Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$50 000	\$50 000	\$1000 00
Action Step: Install updated version of NCS workstation software on licensed machines within the District. Action: upgrade Level: district-wide Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Donita Rowe Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Academic Services Personnel Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$0	\$0	\$0
Action Step: Evaluate prepackaged curriculums from vendors and curriculums from other districts to assist in revisions/creation of technology curriculum. Action: subscribe Level: district-wide Item: on-line books/periodicals Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.	\$0	\$0	\$0	\$0
Action Step: install necessary software on Distance Learning equipment (carts and MCU) Action: upgrade Level: district-wide	\$0	\$0	\$0	\$0

Item: operating system software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: Vendor Contributions Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.				
Action Step: Maintain class lists within Pentamation system. Action: upgrade Level: district-wide Item: student information system Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Principals Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: salary of Principals Objective: Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent.	\$0	\$0	\$0	\$0
Action Step: Maintain parent phone numbers in the Pentamation system. Action: subscribe Level: district-wide Item: student information system Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Principals Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: salary of Principals Objective: Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent.	\$0	\$0	\$0	\$0
Action Step: Ensure that attendance is completed at all buildings by a certain time each day. Action: subscribe Level: district-wide Item: student information system Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Principals Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: salary of Principals Objective: Communication and Information Access Objectives The District will use the telecommunications system to contact	\$0	\$0	\$0	\$0

parents via voice messages when students are absent.				
Action Step: Implement e-mail system for students. Action: expand license Level: district-wide Item: office automation software Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide e-mail access to students as necessary for course work.	\$0	\$0	\$0	\$0
Action Step: Purchase/develop software to house portfolio data via the intranet/internet. Action: aquire license Level: district-wide Item: student information system Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Julie L Primary: District Categorical Funds Secondary: State Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$15 000	\$20 00	\$20 00	\$1900 0
Action Step: Upgrade the OS on all machines within the District to make uniform throughout the entire District. Action: upgrade Level: district-wide Item: operating system software Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: Vendor Contributions Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain workstation functionality to provide necessary support of District functions.	\$19 000	\$0	\$0	\$1900 0
Action Step: Research option of upgrading existing software packages to the latest versions. Action: upgrade Level: district-wide Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds	\$0	\$0	\$0	\$0

Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Maintain workstation functionality to provide necessary support of District functions.				
Action Step: Develop custom screen(s) in student/financial management systems to house additional data. Action: upgrade Level: administrative Item: student information system Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objectives: Administration and Management Objectives Expand the current student database system to house additional student data. Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$0	\$0	\$0	\$0
Action Step: Purchase software to support District initiatives (curriculum needs, etc). Action: aquire license Level: district-wide Item: instructional software Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: Federal Grants Secondary: State Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objectives: Curriculum and Learning Objectives Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology. Administration and Management Objectives Maintain workstation functionality to provide necessary support of District functions.	\$22 000	\$72 000	\$42 000	\$1360 00
Action Step: Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.) Action: upgrade Level: administrative Item: student information system Start Date: Year 1 - Quarter 1 End Date: Year 2 - Quarter 1 Leadership: Angel Woods Primary: District Categorical Funds	\$12 000 0	\$18 000	\$0	\$1380 00

Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objectives: Expand the current student database system to house additional student data. Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent. The District will provide parents access to students' grades, attendance and discipline through web-based software applications. Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills. Communication and Information Access Objectives The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.				
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6.5 ADDRESS SECURITY ISSUES

6.5.1 Understanding Security Measures

The District currently uses security cameras and motion sensors in every building in the District. Video from this system is transmitted to a central security monitoring room in the Administration building. Also, card swipes are used for entry into every building. To enhance physical security of the District's network, all District servers are located in one secure location, with access given only to authorized personnel. Wiring closets in all buildings are locked with the Information Technology Department having the only keys. The District currently uses Norton Anti-virus on all servers and workstations. Also, Fortress is used as desktop protection software. Users are required to change their network password every 40 days. Finally, all critical servers are backed up nightly.

With the District's initiative to increase the number of laptops for students and staff, laptop security will become an issue. Tracking devices for the laptops are being investigated to solve some of the security issues. The current mobile laptop carts are locked with the classroom teacher having the only keys. As more laptops are available for students, policies regarding responsibility and liability will be written.

As part of our three-year technology plan, student data will be available using web based software. This raises the security issue of protecting student data. Procedures and policies will be written to address this issue. Web based software programs being purchased will be evaluated on their ability to provide secure web pages.

Currently the District has acceptable use policies for students and staff. As additional policies and procedures regarding physical and data security are written, they will be posted on the web site. Training classes will cover security issues as deemed appropriate.

6.6 TECHNOLOGY POLICIES AND ACQUISITION STRATEGIES

6.6.1 Technology Policies

Currently, policies are written by a team of Harrisburg School District employees. The team members are selected based on the policy being written. Once written, the policy goes to either the superintendent or the school board for approval. After being approved, policies are communicated to users (through e-mail and/or handouts) and posted on the District web site. Signatures are required on Acceptable Use Policy Forms before students and employees are allowed to use the computers within the District. A program needs to be implemented to track who has returned which policy forms. This most likely will be a part of the custom screens designed for the student information system. In addition, other policies should have signature forms to show that they have been received.

Most policy decisions are made at the Administration level. However, some decisions are made by the Principals at the buildings; such as location of equipment within the building, access rights to certain programs and/or areas of programs, and policies regarding the redistribution of equipment within their building.

There are several new policies that need to be created as a part of this technology plan, such as a data entry policy and security policies. These policies are listed in the action steps for the associated objectives. In addition, other policies need to be reviewed and possibly revised. Our software policy is one area of concern. An updated procedure must be developed and communicated to the schools so teachers know the process of getting software approved and installed on the machines within their classroom.

Another area where policies need to be written has to do with the posting of information on the web. The District's involvement with the Pennsylvania Virtual Academy brings up issues surrounding the following:

- Intellectual property rights regarding the development of courses online.
- Copyright issues surrounding students' and staff works
- The use/loaning of laptops by/to students
- Providing dial-up accounts to students and teachers
- Use of e-mail by students

As the District expands its website and rolls out the electronic portfolio system, policies on who can post information and use of student photos and work need to be written. The equipment procurement procedure needs to be revised based on changes in District directives.

A review of all technology related policies needs to be done yearly. Revisions need to be made to these policies to keep them updated with current District directives and initiatives.

6.6.2 Procurement Procedures

New technology equipment is purchased for a building once its renovations have been completed. Once a year, typically in the summer, the quantity and quality of equipment at all buildings is surveyed, and decisions are made about the redistribution of equipment made available from renovated buildings. If necessary, new equipment is also purchased at that time. The movement and installation of machines is scheduled around summer school and completed before teachers return for the new school year.

Throughout the year, smaller orders are placed to support new initiatives or replace broken equipment. Typically, these purchases are funded from grants or at the building level.

In past years, each building received a technology budget and was given the authority to spend this money as they saw fit. A new procedure is in the process of being written. In the future, funding will be managed by the IT Department. This will ensure that new equipment is compatible with equipment already in place throughout the District, equipment purchases support District initiatives, and money is being spent in areas where it is most needed within the building. The IT Department will determine priorities for each building based on age of current equipment and critical mass ratios for the building. Buildings will be able to request specific equipment, but will need to justify the requests and get approval from IT before orders are placed.

All software packages are purchased through the IT Department. Many are chosen by the IT Department based on District needs. Academic Services must approve all student software packages to ensure they support the District curriculum. Currently, if a teacher wants to use a specific package in their classroom, they must obtain approval from both Academic Service and the IT Department. The package is then installed by the IT Department.

6.6.3 Technology Acquisition Model

The Harrisburg School District has set the following critical mass algorithms:

- One student workstation (with CD Rom and network card) for each student
- One workstation for each faculty/staff/administrator
- Sixteen to twenty workstations in each library
- One color printer in each classroom
- Each administrator has access to a color printer, either locally installed or on the network
- One color printer in each library
- One scanner for each grade level within a building
- One telephone in each classroom
- One telephone for each administrator
- One television/video monitor in each classroom
- One video center in each building (VCR) - connected to video monitors in the classroom via the network
- One data/video projector for every ten classrooms
- Two video cameras per building
- Four digital still cameras per building
- Data network a combination of wireless and wire connections - each classroom has at least one wire connection
- Two mobile Distance Learning carts per building
- CD burners as required for District initiatives

Many of these ratios are already met throughout the entire District or within several buildings. As the renovation projects continue, buildings will be brought up to these ratios. In addition, the rollout of new programs (such as the digital portfolio system) will include the purchase of more of this equipment (i.e. digital cameras, etc.).

As equipment "breaks down," it is evaluated to determine whether it should be repaired or retired. Each summer, the quantity and quality of equipment within a building is surveyed. Decisions are made about the minimum requirements for equipment within the District, and equipment is retired if it does not meet these requirements and it is not feasible to upgrade it to the new level. Generally, machines are retired after five years of use. Although these machines may remain in the District as word processing and/or internet machines only, they are not counted in the mass algorithms. The new machines that are being purchased are the latest models available, to ensure they will last for the full five years.

The Director of Technology is involved in the annual budget process. A technology budget is prepared which includes the costs of maintaining and replacing all technology related equipment within the District. The Director is available to answer any questions the cabinet and/or Board may have about specific line items within the budget. This ensures that appropriate funding is available to support all technology within the District.

Section 7 - Human Resources and Support Management and Development Action Plans

7.1 STAFF DEVELOPMENT

7.1.1 Staff Action Plan

Staff Action Steps	Co st Ye ar 1	Co st Ye ar 2	Co st Ye ar 3	3- Year Est. Total
Action Step: Train IT personnel to support Parent Access Module. Action: provide Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Included in the cost of the software Objective: Communication and Information Access Objectives The District will provide parents access to students' grades, attendance and discipline through web-based software applications.	\$0	\$0	\$0	\$0
Action Step: Train parents and/or building level staff on use of the Parent Access Module. Action: conduct Level: district certified staff Item: applications training programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide parents access to students' grades, attendance and discipline through web-based software applications.	\$0	\$0	\$0	\$0
Action Step: Continue to offer beginning, intermediate and advanced level training on e-mail system. Action: conduct	\$0	\$0	\$0	\$0

Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.				
Action Step: Train teachers on Teacher Workstation software. Action: conduct Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: Vendor Contributions Secondary: Federal Grants Budget Code: 318 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.	\$12 000	\$0	\$0	\$1200 0
Action Step: Train necessary District personnel on Pentamation System. Action: conduct Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 348 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.	\$72 00	\$0	\$0	\$7200
Action Step: Train authorized users on how to post information to the District website. Action: conduct Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999	\$0	\$0	\$0	\$0

Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.				
Action Step: Train district personnel on use of the voice mail system. Action: conduct Level: district certified staff Item: on-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community.	\$0	\$0	\$0	\$0
Action Step: Train personnel on dial-up access. Action: conduct Level: district certified staff Item: on-site workshops Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide necessary District personnel with the ability to connect from remote locations to the district network.	\$0	\$0	\$0	\$0
Action Step: Train school level staff how to maintain student e-mail accounts. Action: conduct Level: district certified staff Item: on-site workshops Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide e-mail access to students as necessary for course work.	\$0	\$0	\$0	\$0
Action Step: Train IT staff on support of homework hotline. Action: provide Level: district certified staff Item: applications training programs	\$0	\$0	\$0	\$0

Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Holly Worful Primary: District Categorical Funds Secondary: None Budget Code: 318 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide a homework hotline, for students and parents, via the telecommunication systems.				
Action Step: Train teachers on how to setup and use the homework hotline. Action: provide Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide a homework hotline, for students and parents, via the telecommunication systems.	\$0	\$0	\$0	\$0
Action Step: Train students on how to access network resources remotely. Action: conduct Level: district certified staff Item: tech/curriculum integration programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.	\$0	\$0	\$0	\$0
Action Step: Train teachers on how to support student remote access. Action: conduct Level: district certified staff Item: tech/curriculum integration programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide remote access for students to use	\$0	\$0	\$0	\$0

technology resources as needed for course work.				
Action Step: Train administrators on new custom screens in student information system. Action: provide Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Train Administrators on the use of new modules and software available to access information.	\$0	\$0	\$0	\$0
Action Step: Train administrators on how to access and run new reports and use new software applications. Action: provide Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Academic Services Personnel Objective: Administration and Management Objectives Enable Administrators to utilize data to make decisions.	\$0	\$0	\$0	\$0
Action Step: Train necessary personnel on use of facilities system. Action: conduct Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Tim Curtis Primary: District Categorical Funds Secondary: None Budget Code: 318 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.	\$13 00	\$0	\$0	\$1300
Action Step: Train necessary administrative staff on use of transportation management system. Action: conduct Level: administrators Item: applications training programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Bill Gretton Primary: District Categorical Funds Secondary: None Budget Code: 999	\$0	\$0	\$0	\$0

Est. Unit Cost: 0 Budget Note: Included in software cost Objective: Administration and Management Objectives Implement a transportation management system.				
Action Step: Train security staff on use of equipment and security plan. Action: provide Level: district certified staff Item: applications training programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Thom Johnson Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.	\$0	\$0	\$0	\$0
Action Step: Send IT personnel for training on Microsoft 2000 Server, IIS, ASP, SQL and web-based database application. Action: outsource Level: district certified staff Item: off-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 318 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions.	\$8000	\$0	\$0	\$8000
Action Step: Train necessary District personnel on the use of web-based applications. Action: provide Level: district certified staff Item: applications training programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Design and create web-based database applications to enhance the support of district functions.	\$0	\$0	\$0	\$0
Action Step: Train teachers on use of the Auditory Processing software package. Action: provide Level: elementary teachers Item: applications training programs	\$0	\$0	\$0	\$0

Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement an auditory processing system in grades 2-5 (FastForWord)				
Action Step: Train teaching staff on use of the software package, including how to integrate it into their daily lesson plans. Action: provide Level: high school teachers Item: applications training programs Start Date: Year 1 - Quarter 4 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Implement a curriculum based instructional system in grades 9-12.	\$0	\$0	\$0	\$0
Action Step: Send integrators to workshops/seminars to acquire new methods of integrating technology into the curriculum. Action: outsource Level: administrators Item: on-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 328 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom.	\$18 00	\$18 00	\$18 00	\$5400
Action Step: Hold training workshops with teachers to show how to use technology in the different subject areas/grade levels. Action: provide Level: district certified staff Item: tech/curriculum integration programs Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and	\$0	\$0	\$0	\$0

classroom.				
Action Step: Through PTO/PTA, bring parents into the classroom to work with students in the area of technology. Action: outsource Level: non-certified staff Item: mentorship programs Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Sandra Myers Primary: Other Secondary: None Budget Code: 0 Est. Unit Cost: 0 Budget Note: Parent Volunteers Objective: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom.	\$0	\$0	\$0	\$0
Action Step: Work with Harrisburg Area Community College to provide additional classes to teaching staff. Action: outsource Level: district certified staff Item: off-site workshops Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: Vendor Contributions Secondary: None Budget Code: 318 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.	\$0	\$0	\$0	\$0
Action Step: Train teaching staff on the upgraded version of NCS Learn. Action: provide Level: district certified staff Item: tech/curriculum integration programs Start Date: Year 1 - Quarter 4 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$0	\$0	\$0
Action Step: Train IT Integration Division on upgraded version of NCS Learn. Action: provide Level: administrators Item: tech/curriculum integration programs Start Date: Year 1 - Quarter 3 End Date: Year 1 - Quarter 3 Leadership: Kim Cuff	\$5600	\$0	\$0	\$5600

Primary: District Categorical Funds Secondary: State Grants Budget Code: 328 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)				
Action Step: provide necessary training for students and teachers on online course software Action: conduct Level: high school teachers Item: on-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.	\$0	\$0	\$0	\$0
Action Step: train IT staff on supporting online course software support Action: outsource Level: administrators Item: off-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: State Grants Budget Code: 328 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.	\$300	\$0	\$0	\$300
Action Step: train teaching staff on how to operate Distance Learning equipment Action: conduct Level: district certified staff Item: on-site workshops Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.	\$0	\$0	\$0	\$0
Action Step: train IT staff on supporting new Distance Learning	\$3600	\$1800	\$1800	\$7200

equipment Action: outsource Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: Vendor Contributions Budget Code: 348 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.				
Action Step: Train IT on use/support of portfolio systems. Action: provide Level: administrators Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: Vendor Contributions Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel, training included in development of system Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$0	\$0	\$0	\$0
Action Step: Train users (teachers/students) on use of the portfolio systems (how to add/update information, etc.). Action: provide Level: district certified staff Item: applications training programs Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$0	\$0	\$0	\$0
Action Step: Determine appropriate training for District positions. Action: conduct Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None	\$0	\$0	\$0	\$0

Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objectives: Administration and Management Objectives Train Administrators on District software applications. Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.				
Action Step: Develop training classes for new courses and add courses to the training schedule. Action: provide Level: district certified staff Item: applications training programs Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objectives: Administration and Management Objectives Train Administrators on District software applications. Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.	\$0	\$0	\$0	\$0
Action Step: Offer training to District personnel. Action: provide Level: district certified staff Item: on-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objectives: Curriculum and Learning Objectives Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology. Administration and Management Objectives Train Administrators on District software applications. Train Administrators on the use of new modules and software available to access information. Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.	\$0	\$0	\$0	\$0
Action Step: Hire substitutes so teachers can attend technology training. Action: provide	\$48 096 0	\$48 096 0	\$48 096 0	\$1442 880

Level: district certified staff Item: on-site workshops Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Parthenia Moore Primary: State Grants Secondary: Federal Grants Budget Code: 999 Est. Unit Cost: 0 Budget Note: \$120 a day for a substitute Objective: Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.				

7.2 TECHNOLOGY STAFF

7.2.1 Technology Action Plan

Technology Action Steps	Cost Year 1	Cost Year 2	Cost Year 3	3-Year Est. Total
Action Step: Hire Technology Integrators (tentative goal - six). Action: provide full-time Level: district-wide Item: instructional technology liaisons Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: State Grants Budget Code: 999 Est. Unit Cost: 0 Budget Note: see Salaries for Technology Integration Department Objectives: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom. Expand existing curriculum based instructional system in grades K-8 (NCSLearn) Implement a curriculum based instructional system in grades 9-12. Implement an auditory processing system in grades 2-5 (FastForWord)	\$0	\$0	\$0	\$0
Action Step: Determine staffing needs for new curriculum and hire additional teachers if necessary. Action: expand Level: district-wide Item: technology coordinators/support staff Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Mark Holman Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: District Teaching Staff Funds Objective: Curriculum and Learning Objectives	\$0	\$0	\$0	\$0

Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.				
Action Step: Pay overtime/supplementals to employees to supervise after school programs and/or extended library hours. Action: provide part-time Level: district-wide Item: instructional support staff Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Carol Graham Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives Provide students with out of school day access to technology.	\$13 400 0	\$13 400 0	\$13 400 0	\$4020 00
Action Step: Hire Security Systems Network Administrator (See Salaries for Technology Network Division) Action: provide full-time Level: district-wide Item: network administrator Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: See Salaries for Technology Network Division Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.	\$0	\$0	\$0	\$0
Action Step: Maintain staffing levels for Technology Networking Division Action: provide full-time Level: technology unit Item: network administrator Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salaries and Benefits Objective: Administration and Management Objectives Maintain sufficient staffing levels to support District technology functions.	\$37 761 8	\$38 894 6	\$40 061 4	\$1167 178
Action Step: Review workloads of current staff and hire additional staff as needed to continue to provide a high level of technical support to the entire District. Action: provide full-time Level: district-wide Item: end-user support staff Start Date: Year 1 - Quarter 1	\$0	\$0	\$0	\$0

End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Maintain sufficient staffing levels to support District technology functions.				
Action Step: Hire Technology Trainers (See Salaries for Technology Integration Department) Action: provide full-time Level: district-wide Item: instructional support staff Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: See Salaries for Technology Integration Department Objectives: Administration and Management Objectives Train Administrators on District software applications. Train Administrators on the use of new modules and software available to access information. Curriculum and Learning Objectives Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.	\$0	\$0	\$0	\$0
Action Step: Maintain staffing levels for Technology Integration Division (Trainers and Integrators) Action: provide full-time Level: elementary school Item: technology coordinators/support staff Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salaries and Benefits Objective: Administration and Management Objectives Maintain sufficient staffing levels to support District technology functions.	\$54 338 4	\$59 417 7	\$61 200 3	\$1749 564
Action Step: Maintain staffing levels for Technology Operations Division (Database Administrators and Daily Operations) Action: provide full-time Level: elementary school Item: technology coordinators/support staff Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 999	\$54 338 4	\$55 968 4	\$57 647 5	\$1679 543

Est. Unit Cost: 0 Budget Note: Salary and Benefits Objective: Administration and Management Objectives Maintain sufficient staffing levels to support District technology functions.				
Action Step: Maintain Director of Information Technology and Administrative Assistant Action: provide full-time Level: district-wide Item: technology coordinators/support staff Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary and Benefits Objective: Administration and Management Objectives Maintain sufficient staffing levels to support District technology functions.	\$15 240 0	\$15 697 2	\$16 168 0	\$4710 52

7.3 END-USER SUPPORT

7.3.1 End User Support Action Plan

End User Support Action Steps	Cost Year r 1	Cost Year r 2	Cost Year r 3	3-Year Est. Total
Action Step: Publicize Parent Access Module to parents within the District. Action: implement Level: school-based Item: on-line processes, FAQs, guidelines Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: State Grants Budget Code: 648 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide parents access to students' grades, attendance and discipline through web-based software applications.	\$30 0	\$30 0	\$30 0	\$900
Action Step: Develop procedures and policies for posting information on the District website. Action: develop Level: district-wide Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 3 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999	\$0	\$0	\$0	\$0

Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.				
Action Step: Develop procedure for submitting educational links to the District website. Action: develop Level: district-wide Item: maintenance contracts Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide web-based research resources to the educational community.	\$0	\$0	\$0	\$0
Action Step: Provide access to online research databases. Action: expand Level: district-wide Item: on-line processes, FAQs, guidelines Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide web-based research resources to the educational community.	\$29 000	\$29 000	\$29 000	\$8700 0
Action Step: Publicize to students and parents how to access the homework hotline. Action: implement Level: district-wide Item: on-line processes, FAQs, guidelines Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 648 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will provide a homework hotline, for students and parents, via the telecommunication systems.	\$50 0	\$50 0	\$50 0	\$1500
Action Step: Develop policy on student usage through remote access. Action: develop Level: district-wide	\$0	\$0	\$0	\$0

Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.				
Action Step: maintain service agreement for Distance Learning equipment Action: contract for Level: district-wide Item: maintenance contracts Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.	\$48 000	\$48 000	\$48 000	\$1440 00
Action Step: Communicate data standards to appropriate personnel. Action: implement Level: district-wide Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Develop standards for uniform data entry to ensure data integrity.	\$0	\$0	\$0	\$0
Action Step: Meet with appropriate Administrators and determine necessary data to be housed on the student information system. Action: develop Level: district-wide Item: on-line processes, FAQs, guidelines Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives	\$0	\$0	\$0	\$0

Expand the current student database system to house additional student data.				
Action Step: Determine necessary reports to be developed to better support administrative staff. Action: develop Level: district-wide Item: technical support services Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives Enable Administrators to utilize data to make decisions.	\$0	\$0	\$0	\$0
Action Step: Develop policy on student e-mail usage. Action: develop Level: district-wide Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 3 End Date: Year 2 - Quarter 1 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide e-mail access to students as necessary for course work.	\$0	\$0	\$0	\$0
Action Step: Maintain phone service Action: acquire Level: elementary school Item: maintenance contracts Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Holly Worful Primary: District Categorical Funds Secondary: None Budget Code: 538 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing service agreements to support District technology functions.	\$96 00	\$96 00	\$96 00	\$2880 0
Action Step: Provide support to teachers as they integrate technology into their curriculums. Action: implement Level: school-based Item: technical support services Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999	\$0	\$0	\$0	\$0

Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom.				
Action Step: Evaluate current technology and academic curriculums, and revise to include technology standards. Action: develop Level: district-wide Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom.	\$68 00	\$68 00	\$68 00	\$2040 0
Action Step: Provide support to teachers and students on the new version of NCS Learn. Action: implement Level: district-wide Item: technical support services Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Expand existing curriculum based instructional system in grades K-8 (NCSLearn)	\$0	\$0	\$0	\$0
Action Step: Assist in implementing new curriculum. Action: implement Level: district-wide Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 4 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.	\$0	\$0	\$0	\$0
Action Step: Communicate new curriculum information to teaching staff. Action: implement Level: district-wide	\$0	\$0	\$0	\$0

Item: on-line tech standards, policies, etc. Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.				
Action Step: Determine the technological needs of new District initiatives as they are defined. Action: develop Level: district-wide Item: plan implementation consulting services Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.	\$0	\$0	\$0	\$0
Action Step: Maintain contract with Internet Service Provider. Action: outsource Level: district-wide Item: technical support services Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: State Grants Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing service agreements to support District technology functions.	\$17 000	\$17 000	\$17 000	\$5100 0
Action Step: Maintain service agreements to provide additional technology support on major projects. Action: contract for Level: district-wide Item: technical support services Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: John Weaver Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 348 Est. Unit Cost: 0 Budget Note:	\$60 000	\$60 000	\$60 000	\$1800 00

Objective: Administration and Management Objectives Maintain existing service agreements to support District technology functions.				
Action Step: Maintain service agreement with Avaya to provide additional network support on their equipment. Action: contract for Level: district-wide Item: maintenance contracts Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Administration and Management Objectives Maintain existing service agreements to support District technology functions.	\$22 800 0	\$22 800 0	\$22 800 0	\$6840 00
Action Step: Publicize to the educational community what information is available on the web, and how to access it. Action: implement Level: district-wide Item: on-line processes, FAQs, guidelines Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 648 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.	\$30 0	\$30 0	\$30 0	\$900
Action Step: Develop and maintain a software and technology literature library. Action: develop Level: district-wide Item: technical support services Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 648 Est. Unit Cost: 0 Budget Note: Objectives: Administration and Management Objectives Train Administrators on District software applications. Curriculum and Learning Objectives Expand the integration of technology in the curriculum and classroom. Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.	\$60 00	\$60 00	\$60 00	\$1800 0

Action Step: Maintain service agreement for student data/financial accounting system. Action: contract for Level: district-wide Item: maintenance contracts Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objectives: Communication and Information Access Objectives The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access. Administration and Management Objectives Maintain existing service agreements to support District technology functions.	\$38 000	\$38 000	\$38 000	\$1140 00
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7.4 MISCELLANEOUS

7.4.1 Miscellaneous Action Plan

Miscellaneous Action Steps	Co st Ye ar 1	Co st Ye ar 2	Co st Ye ar 3	3- Year Est. Total
Action Step: Form data standards committee. Action: Miscellaneous Level: administrative Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Jeremy Freeland Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives Develop standards for uniform data entry to ensure data integrity.	\$0	\$0	\$0	\$0
Action Step: Write district policy on data entry. Policy should cover field definitions and formats for each field. Action: configure Level: administrative Item: Miscellaneous Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 2 Leadership: Jeremy Freeland Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives	\$0	\$0	\$0	\$0

Develop standards for uniform data entry to ensure data integrity.				
Action Step: Develop and implement interface module between Pentamation System and Parent Notification Module. Action: configure Level: district-wide Item: Network Design Start Date: Year 1 - Quarter 3 End Date: Year 2 - Quarter 1 Leadership: Angel Woods Primary: Federal Grants Secondary: District Categorical Funds Budget Code: 438 Est. Unit Cost: 0 Budget Note: Objective: Communication and Information Access Objectives The District will use the telecommunications system to contact parents via voice messages when students are absent.	\$1800	\$0	\$0	\$1800
Action Step: Maintain user accounts on GroupWise system. Action: support Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.	\$0	\$0	\$0	\$0
Action Step: Maintain user accounts and security on Parent Access Module. Action: support Level: district-wide Item: Network Design Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide parents access to students' grades, attendance and discipline through web-based software applications.	\$0	\$0	\$0	\$0
Action Step: Maintain user accounts for Web Server. Action: support Level: district-wide Item: Network Design Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer	\$0	\$0	\$0	\$0

Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.				
Action Step: Maintain security to confidential web pages. Action: support Level: district-wide Item: Network Design Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.	\$0	\$0	\$0	\$0
Action Step: Investigate potential partnerships with educational institutions for providing educational resources. Action: outsource Level: district-wide Item: Miscellaneous Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Kim Cuff Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide web-based research resources to the educational community.	\$0	\$0	\$0	\$0
Action Step: Maintain dial-up accounts for necessary district personnel. Action: support Level: district-wide Item: Miscellaneous Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide necessary District personnel with the ability to connect from remote locations to the district network.	\$0	\$0	\$0	\$0

Action Step: Research options for e-mail service for students Action: provide Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 3 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Communication and Information Access Objectives The District will provide e-mail access to students as necessary for course work.	\$0	\$0	\$0	\$0
Action Step: Research options to allow students to connect to network resources from remote locations. Action: conduct Level: administrative Item: Network Design Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Brett Henry Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.	\$0	\$0	\$0	\$0
Action Step: Determine which students need remote access to network resources. Action: Miscellaneous Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 3 End Date: Year 3 - Quarter 4 Leadership: Principals Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Principals Objective: Communication and Information Access Objectives The District will provide remote access for students to use technology resources as needed for course work.	\$0	\$0	\$0	\$0
Action Step: Evaluate current facilities systems and research options to consolidate into one system. Action: conduct Level: administrative Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Tim Curtis Primary: District Categorical Funds Secondary: None Budget Code: 999	\$0	\$0	\$0	\$0

Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives Consolidate the current facilities system to make uniform throughout the District.				
Action Step: Research options for transportation management system. Action: conduct Level: administrative Item: Miscellaneous Start Date: Year 1 - Quarter 3 End Date: Year 1 - Quarter 4 Leadership: Bill Gretton Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Administration and Management Objectives Implement a transportation management system.	\$0	\$0	\$0	\$0
Action Step: Evaluate security equipment and problem areas. Action: conduct Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Thom Johnson Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.	\$0	\$0	\$0	\$0
Action Step: Develop revised security plan. Action: expand Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 3 End Date: Year 1 - Quarter 4 Leadership: Thom Johnson Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.	\$0	\$0	\$0	\$0
Action Step: Implement new security plan throughout the District. Action: configure Level: district-wide Item: Miscellaneous Start Date: Year 2 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Thom Johnson	\$0	\$0	\$0	\$0

Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Administration and Management Objectives Update the current security system to ensure safety in the schools.				
Action Step: Create new or review current curriculum for each grade level and make necessary revisions based on PDE standards and available technology. Action: Miscellaneous Level: administrative Item: Miscellaneous Start Date: Year 1 - Quarter 2 End Date: Year 3 - Quarter 4 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.	\$0	\$0	\$0	\$0
Action Step: Create a committee for each grade level comprised of teachers, and representatives from Academic Services and Information Technology. Action: Miscellaneous Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Parthenia Moore Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.	\$68 00	\$68 00	\$68 00	\$2040 0
Action Step: Survey current number of student machines in the classrooms and compare to the number of students within each building. Action: conduct Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 1 Leadership: Angel Woods Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel	\$0	\$0	\$0	\$0

Objective: Communication and Information Access Objectives Achieve a ratio of one computer per student.				
Action Step: Join and maintain membership in Pennsylvania Virtual Academy Coalition. Action: purchase Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.	\$500	\$1500	\$500	\$2500
Action Step: Fund supplemental contracts for writing and teaching online courses. Action: contract for Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Mark Holman Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 999 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.	\$18000	\$18000	\$18000	\$54000
Action Step: research additional online courses for students Action: purchase Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through online courses.	\$0	\$0	\$0	\$0
Action Step: maintain PDL membership (Partners in Distance Learning) Action: contract for Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer	\$500	\$500	\$500	\$1500

Primary: District Categorical Funds Secondary: None Budget Code: 618 Est. Unit Cost: 0 Budget Note: Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.				
Action Step: investigate possible virtual fieldtrips and courses for students Action: support Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Provide additional educational opportunities beyond the traditional school boundaries through distance learning.	\$0	\$0	\$0	\$0
Action Step: Research option of extending library hours to include weekends/evenings. Action: conduct Level: library/media centers Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Principals Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of District Personnel Objective: Communication and Information Access Objectives Provide students with out of school day access to technology.	\$0	\$0	\$0	\$0
Action Step: Investigate/develop partnerships with EMO, Avaya, and other local businesses to provide students with internships. Action: outsource Level: high school Item: Miscellaneous Start Date: Year 1 - Quarter 3 End Date: Year 2 - Quarter 1 Leadership: John Weaver Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.	\$0	\$0	\$0	\$0
Action Step: Investigate/develop partnership with the State Library to	\$0	\$0	\$0	\$0

provide additional research tools to students. Action: outsource Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 3 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.				
Action Step: Develop Acceptable Use Policy on use of portfolio system(s). Action: conduct Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 2 End Date: Year 1 - Quarter 3 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$0	\$0	\$0	\$0
Action Step: Research options to provide portfolio system to students/parents/teachers. Action: conduct Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 1 - Quarter 2 Leadership: Julie Lehmer Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objective: Curriculum and Learning Objectives Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.	\$0	\$0	\$0	\$0
Action Step: Maintain user accounts and mailboxes on the telecommunications system. Action: support Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Holly Worful	\$0	\$0	\$0	\$0

Primary: District Categorical Funds Secondary: None Budget Code: 999 Est. Unit Cost: 0 Budget Note: Salary of Technology Personnel Objectives: Communication and Information Access Objectives The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community. The District will provide a homework hotline, for students and parents, via the telecommunication systems.				
Action Step: Research and implement after school programs that give students access to technology. Action: provide Level: district-wide Item: Miscellaneous Start Date: Year 1 - Quarter 1 End Date: Year 3 - Quarter 4 Leadership: Principal Primary: District Categorical Funds Secondary: Federal Grants Budget Code: 999 Est. Unit Cost: 0 Budget Note: see Action Step of Paying Supplementals for after school programs and extended library hours. Objective: Communication and Information Access Objectives Provide students with out of school day access to technology.	\$0	\$0	\$0	\$0

Section 8 - Fiscal Analysis and Budget

8.1 THREE-YEAR BUDGET

8.1.1 Three-Year Line-Item Budget

Over the next three years, the District's Technology Plan budget is \$41.5 million. While our technology plan and its costs may seem ambitious, a large part of that funding is from federal grants especially E-rate. The District's funding for this plan is approximately four million dollars annually for a total of approximately twelve million dollars over three years.

Due to major renovation projects and our planned upgrade to the network infrastructure, especially the fiber ring connecting the District's buildings, 56% of the budget is in the Facilities, Networks and Infrastructure category. In addition, the ratio goal of one computer for every student pushes the hardware funding to almost 18% of the total budget. Software funding is accounts for 2.9% of the budget. The budget includes 13% for technology staffing which includes the Technology Integration Department.

The Professional Development budget appears low at only 3.5% of the total budget. However, by adding in the Technology Integration Department's salaries it increase the Professional Development budget to 7.8%. Technology training and integration is so important to the to the District's goals that the District's budget for next year already includes the salaries for two Technology Trainers, six Technology Integrators and one Technology Integration Supervisor. Much of the staff development for the professional teaching staff will be done during in-service days at no cost to the District other than the above mentioned salaries. However, funds have been included to pay substitutes for additional staff development days. The use of the "train the trainer" model will also educate users without large cost to the District. The technology trainers and integrators will be sent to training sessions, then use that training in their daily work as technology trainers and integrators. This keeps our training expenses lower since cost of outsourcing training can be significant.

Line-Item Budget

Information Management Systems	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
decision support system	\$0.00	\$4,200.00	\$100.00	\$4,300.00	618	District Categorical Funds
decision support system	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
maintenance/building management system	\$3,200.00	\$160.00	\$160.00	\$3,520.00	618	District Categorical Funds
operating system software	\$1,800.00	\$1,800.00	\$1,800.00	\$5,400.00	618	Vendor Contributions
operating system software	\$19,000.00	\$0.00	\$0.00	\$19,000.00	618	District Categorical Funds
operating system software	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
relational database system	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
student information system	\$135,000.00	\$20,000.00	\$2,000.00	\$157,000.00	618	District Categorical Funds
student information system	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
transportation system	\$0.00	\$42,000.00	\$1,200.00	\$43,200.00	618	District Categorical Funds
web management system	\$41,000.00	\$15,000.00	\$15,000.00	\$71,000.00	618	District Categorical Funds

Workstation Software	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
instructional software	\$22,000.00	\$72,000.00	\$42,000.00	\$136,000.00	618	Federal Grants
instructional software	\$152,000.00	\$152,000.00	\$152,000.00	\$456,000.00	618	District Categorical Funds
instructional software	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
instructional software	\$62,000.00	\$112,000.00	\$112,000.00	\$286,000.00	618	State Grants
office automation software	\$11,200.00	\$0.00	\$6,200.00	\$17,400.00	618	District Categorical Funds
office automation software	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
on-line books/periodicals	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds

Classroom and Office Hardware	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
AV/TV equipment (i.e., VCR, DVD)	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
AV/TV equipment (i.e., VCR, DVD)	\$40,000.00	\$10,000.00	\$8,000.00	\$58,000.00	768	State Grants
mini-/mainframe computers	\$8,000.00	\$0.00	\$0.00	\$8,000.00	348	District Categorical Funds
mini-/mainframe computers	\$25,000.00	\$0.00	\$0.00	\$25,000.00	768	District Categorical Funds
multimedia equipment	\$68,000.00	\$0.00	\$0.00	\$68,000.00	768	Federal Grants
peripherals (i.e., printers, scanners, etc.)	\$58,000.00	\$29,000.00	\$29,000.00	\$116,000.00	758	State Grants
student workstations	\$450,000.00	\$800,000.00	\$1,000,000.00	\$2,250,000.00	758	Local Bonds
student workstations	\$56,000.00	\$23,000.00	\$0.00	\$79,000.00	758	Federal Grants
student workstations	\$10,000.00	\$10,000.00	\$10,000.00	\$30,000.00	338	District Categorical Funds
student workstations	\$6,800.00	\$7,480.00	\$8,220.00	\$22,500.00	438	District Categorical Funds
student workstations	\$1,226,500.00	\$1,598,500.00	\$1,604,500.00	\$4,429,500.00	758	District Categorical Funds
student workstations	\$122,000.00	\$122,000.00	\$122,000.00	\$366,000.00	768	District Categorical Funds

student workstations	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
student workstations	\$27,000.00	\$27,000.00	\$27,000.00	\$81,000.00	758	State Grants
Facilities, Networks, & Infrastructure	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
building network equipment	\$12,000.00	\$12,000.00	\$12,000.00	\$36,000.00	438	Federal Grants
building network equipment	\$900,000.00	\$0.00	\$0.00	\$900,000.00	758	Federal Grants
building network equipment	\$4,800,000.00	\$4,300,000.00	\$1,800,000.00	\$10,900,000.00	768	Federal Grants
communications servers	\$19,000.00	\$0.00	\$0.00	\$19,000.00	758	Federal Grants
communications servers	\$11,000.00	\$0.00	\$0.00	\$11,000.00	618	Vendor Contributions
communications servers	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
distance learning equipment	\$12,000.00	\$0.00	\$0.00	\$12,000.00	328	Vendor Contributions
wide-area network equipment	\$3,200,000.00	\$2,800,000.00	\$1,100,000.00	\$7,100,000.00	758	Federal Grants
wide-area network equipment	\$42,000.00	\$0.00	\$0.00	\$42,000.00	768	Federal Grants
wide-area network equipment	\$3,800,000.00	\$247,000.00	\$247,000.00	\$4,294,000.00	768	Vendor Contributions
Transport/Telecommunications Services	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
communications lines, satellite/ISP service	\$36,000.00	\$36,000.00	\$36,000.00	\$108,000.00	448	Federal Grants
network servers	\$228,000.00	\$1,000.00	\$1,000.00	\$230,000.00	438	District Categorical Funds
network servers	\$44,000.00	\$0.00	\$0.00	\$44,000.00	758	District Categorical Funds
network servers	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
network servers	\$144,000.00	\$1,800.00	\$85,800.00	\$231,600.00	758	State Grants
phone/voice mail services	\$105,000.00	\$105,000.00	\$105,000.00	\$315,000.00	438	Federal Grants
phone/voice mail services	\$3,000.00	\$0.00	\$0.00	\$3,000.00	348	Vendor Contributions
phone/voice mail services	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
wide-area network services	\$232,000.00	\$0.00	\$0.00	\$232,000.00	438	Federal Grants
wide-area network services	\$1,000.00	\$0.00	\$0.00	\$1,000.00	348	District Categorical Funds
Staffing	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
end-user support staff	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
instructional support staff	\$134,000.00	\$134,000.00	\$134,000.00	\$402,000.00	999	District Categorical Funds
instructional technology liaisons	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
network administrator	\$377,618.00	\$388,946.00	\$400,614.00	\$1,167,178.00	999	District Categorical Funds
technology coordinators/support staff	\$1,239,168.00	\$1,310,833.00	\$1,350,158.00	\$3,900,159.00	999	District Categorical Funds
Support Services/Materials	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
maintenance contracts	\$228,000.00	\$228,000.00	\$228,000.00	\$684,000.00	438	Federal Grants
maintenance contracts	\$86,000.00	\$86,000.00	\$86,000.00	\$258,000.00	438	District Categorical Funds

	00	00	00	0		Funds
maintenance contracts	\$9,600.00	\$9,600.00	\$9,600.00	\$28,800.00	538	District Categorical Funds
maintenance contracts	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
Miscellaneous	\$1,000.00	\$2,000.00	\$1,000.00	\$4,000.00	618	District Categorical Funds
Miscellaneous	\$24,800.00	\$24,800.00	\$24,800.00	\$74,400.00	999	District Categorical Funds
Network Design	\$1,800.00	\$0.00	\$0.00	\$1,800.00	438	Federal Grants
Network Design	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
on-line processes, FAQs, guidelines	\$29,000.00	\$29,000.00	\$29,000.00	\$87,000.00	618	Federal Grants
on-line processes, FAQs, guidelines	\$500.00	\$500.00	\$500.00	\$1,500.00	648	Federal Grants
on-line processes, FAQs, guidelines	\$600.00	\$600.00	\$600.00	\$1,800.00	648	District Categorical Funds
on-line processes, FAQs, guidelines	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
on-line tech standards, policies, etc.	\$6,800.00	\$6,800.00	\$6,800.00	\$20,400.00	999	District Categorical Funds
plan implementation consulting services	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
technical support services	\$17,000.00	\$17,000.00	\$17,000.00	\$51,000.00	618	Federal Grants
technical support services	\$6,000.00	\$6,000.00	\$6,000.00	\$18,000.00	648	Federal Grants
technical support services	\$60,000.00	\$60,000.00	\$60,000.00	\$180,000.00	348	District Categorical Funds
technical support services	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds

Professional Development	Year 1	Year 2	Year 3	Three Year Total	Budget Code	Funding Source
applications training programs	\$12,000.00	\$0.00	\$0.00	\$12,000.00	318	Vendor Contributions
applications training programs	\$1,300.00	\$0.00	\$0.00	\$1,300.00	318	District Categorical Funds
applications training programs	\$10,800.00	\$1,800.00	\$1,800.00	\$14,400.00	348	District Categorical Funds
applications training programs	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
mentorship programs	\$0.00	\$0.00	\$0.00	\$0.00	000	Other
off-site workshops	\$0.00	\$0.00	\$0.00	\$0.00	318	Vendor Contributions
off-site workshops	\$8,000.00	\$0.00	\$0.00	\$8,000.00	318	District Categorical Funds
off-site workshops	\$300.00	\$0.00	\$0.00	\$300.00	328	District Categorical Funds
on-site workshops	\$1,800.00	\$1,800.00	\$1,800.00	\$5,400.00	328	District Categorical Funds
on-site workshops	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
on-site workshops	\$480,960.00	\$480,960.00	\$480,960.00	\$1,442,880.00	999	State Grants
tech/curriculum integration programs	\$5,600.00	\$0.00	\$0.00	\$5,600.00	328	District Categorical Funds
tech/curriculum integration programs	\$0.00	\$0.00	\$0.00	\$0.00	999	District Categorical Funds
TOTAL COSTS:	\$18,876,146.00	\$13,337,579.00	\$9,366,612.00	\$41,580,337.00		

Potential Funding Distribution List
Funding Source

Total Funding

Local Bonds	\$2,250,000.00
Federal Grants	\$20,778,300.00
Vendor Contributions	\$4,337,400.00
District Categorical Funds	\$11,999,157.00
Other	\$0.00
State Grants	\$2,215,480.00
Total	\$41,580,337.00

Total Cost of Ownership

Administration & Management Goal: Increase Administrators' proficiency on District software applications to promote increased productivity.

Associated Objective:

Train Administrators on District software applications.

Action Plan:

Staff Development

Determine appropriate training for District positions.	\$0.00
Develop training classes for new courses and add courses to the training schedule.	\$0.00
Offer training to District personnel.	\$0.00

Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)	\$0.00
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End User

Develop and maintain a software and technology literature library.	\$18,000.00
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Total Cost for Objective **\$18,000.00**

Goal: Increase Administrators' proficiency on District software applications to promote increased productivity.

Associated Objective:

Develop standards for uniform data entry to ensure data integrity.

Action Plan:

Software

Run periodic data integrity checks.	\$0.00
Convert existing data to match new policy standards.	\$0.00

End User

Communicate data standards to appropriate personnel.	\$0.00
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Miscellaneous

Form data standards committee.	\$0.00
Write district policy on data entry. Policy should cover field definitions and formats for each field.	\$0.00

Total Cost for Objective **\$0.00**

Administration & Management Goal: Expand current administrative systems to support District daily operations.

Associated Objective:

Consolidate the current facilities system to make uniform throughout the District.

Action Plan:

Hardware

Purchase hardware for facilities system.	\$25,000.
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Install hardware in buildings for new facilities system.	\$8,000.00
<i>Software</i>	
Install/implement new facilities system.	\$320.00
Purchase facilities system.	\$3,200.00
<i>Staff Development</i>	
Train necessary personnel on use of facilities system.	\$1,300.00
<i>Miscellaneous</i>	
Evaluate current facilities systems and research options to consolidate into one system.	\$0.00
Total Cost for Objective	\$37,820.00

Goal: Expand current administrative systems to support District daily operations.

Associated Objective:

Implement a transportation management system.

Action Plan:

<i>Software</i>	
Implement transportation system.	\$1,200.00
Purchase transportation management system.	\$42,000.00
<i>Staff Development</i>	
Train necessary administrative staff on use of transportation management system.	\$0.00
<i>Miscellaneous</i>	
Research options for transportation management system.	\$0.00
Total Cost for Objective	\$43,200.00

Goal: Expand current administrative systems to support District daily operations.

Associated Objective:

Update the current security system to ensure safety in the schools.

Action Plan:

<i>Hardware</i>	
Replace outdated/broken security equipment.	\$58,000.00
Maintain security equipment.	\$0.00
<i>Staff Development</i>	
Train security staff on use of equipment and security plan.	\$0.00
<i>Technology Staffing</i>	
Hire Security Systems Network Administrator (See Salaries for Technology Network Division)	\$0.00
<i>Miscellaneous</i>	
Implement new security plan throughout the District.	\$0.00

Evaluate security equipment and problem areas.	\$0.00
Develop revised security plan.	\$0.00
Total Cost for Objective	\$58,000.00

Goal: Expand current administrative systems to support District daily operations.

Associated Objective:

Design and create web-based database applications to enhance the support of district functions.

Action Plan:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.	\$8,000.00
Purchase two servers to house web-based database applications.	\$19,000.00
Install Microsoft 2000 Server and other necessary software on servers (IIS, SQL and web-based database application software).	\$11,000.00

Software

Develop and maintain web-based applications for District use.	\$0.00
Purchase necessary server software (Windows 2000, IIS, SQL, web-based database application).	\$71,000.00

Staff Development

Train necessary District personnel on the use of web-based applications.	\$0.00
Send IT personnel for training on Microsoft 2000 Server, IIS, ASP, SQL and web-based database application.	\$8,000.00

Total Cost for Objective **\$117,000.00**

Administration & Management Goal: Use technology to analyze data, determine the impact of current educational initiatives, and lead to data driven decision making.

Associated Objective:

Expand the current student database system to house additional student data.

Action Plan:

Software

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)	\$138,000.00
Develop custom screen(s) in student/financial management systems to house additional data.	\$0.00

End User

Meet with appropriate Administrators and determine necessary data to be housed on the student information system.	\$0.00
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Total Cost for Objective **\$138,000.00**

Goal: Use technology to analyze data, determine the impact of current educational initiatives, and lead to data driven decision making.

Associated Objective:

Train Administrators on the use of new modules and software available to access information.

Action Plan:

Staff Development

Train administrators on new custom screens in student information system.	\$0.00
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Offer training to District personnel.	\$0.00
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Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)	\$0.00
Total Cost for Objective	\$0.00

Goal: Use technology to analyze data, determine the impact of current educational initiatives, and lead to data driven decision making.

Associated Objective:

Enable Administrators to utilize data to make decisions.

Action Plan:

Software

Write custom reports for Administrators.	\$0.00
Review and purchase new software to simplify data analysis.	\$4,300.00
Maintain necessary user access to appropriate applications.	\$0.00

Staff Development

Train administrators on how to access and run new reports and use new software applications.	\$0.00
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End User

Determine necessary reports to be developed to better support administrative staff.	\$0.00
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Total Cost for Objective	\$4,300.00
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Administration & Management Goal: Maintain support for District technology functions.

Associated Objective:

Maintain sufficient staffing levels to support District technology functions.

Action Plan:

Technology Staffing

Maintain staffing levels for Technology Operations Division (Database Administrators and Daily Operations)	\$1,679,543.00
Maintain Director of Information Technology and Administrative Assistant	\$471,052.00
Maintain staffing levels for Technology Networking Division	\$1,167,178.00
Review workloads of current staff and hire additional staff as needed to continue to provide a high level of technical support to the entire District.	\$0.00
Maintain staffing levels for Technology Integration Division (Trainers and Integrators)	\$1,749,564.00

Total Cost for Objective	\$5,067,337.00
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Goal: Maintain support for District technology functions.

Associated Objective:

Maintain existing service agreements to support District technology functions.

Action Plan:

End User

Maintain service agreement with Avaya to provide additional network support on their equipment.	\$684,000.00
Maintain service agreement for student data/financial accounting system.	\$114,000

	.00
Maintain phone service	\$28,800.
	00
Maintain contract with Internet Service Provider.	\$51,000.
	00
Maintain service agreements to provide additional technology support on major projects.	\$180,000
	.00
Total Cost for Objective	\$1,057,800.00

Goal: Maintain support for District technology functions.

Associated Objective:

Maintain workstation functionality to provide necessary support of District functions.

Action Plan:

Hardware

Repair/upgrade workstation hardware to ensure the ability to support District software.	\$22,500.
	00

Software

Purchase software to support District initiatives (curriculum needs, etc).	\$136,000
	.00
Upgrade the OS on all machines within the District to make uniform throughout the entire District.	\$19,000.
	00
Research option of upgrading existing software packages to the latest versions.	\$0.00
Total Cost for Objective	\$177,500.00

Goal: Maintain support for District technology functions.

Associated Objective:

Maintain existing network (hardware and software) to support all District functions.

Action Plan:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.	\$8,000.0
	0
Upgrade and maintain the existing fiber backbone. Upgrade from ATM to Gigabit Ethernet.	\$4,294,000.00
Upgrade and maintain internal connectivity within the buildings (switches, hubs, routers, wireless hubs, network jacks, etc).	\$36,000.
	00
Purchase equipment to reduce network downtime and protect network equipment (UPS, etc.).	\$900,000
	.00
Total Cost for Objective	\$5,238,000.00

Communication & Information Access Goal: The District will provide parents and district personnel access to necessary student information.

Associated Objective:

The District will use the telecommunications system to contact parents via voice messages when students are absent.

Action Plan:

Install Parent Notification Module for PBX system.	\$3,000.0
	0
Maintain and upgrade the PBX system, both hardware and software.	\$315,000
	.00

Software

Maintain parent phone numbers in the Pentamation system.	\$0.00
Ensure that attendance is completed at all buildings by a certain time each day.	\$0.00
Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)	\$138,000.00
Maintain class lists within Pentamation system.	\$0.00

Miscellaneous

Develop and implement interface module between Pentamation System and Parent Notification Module.	\$1,800.00
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Total Cost for Objective **\$457,800.00**

Goal: The District will provide parents and district personnel access to necessary student information.

Associated Objective:

The District will provide parents access to students' grades, attendance and discipline through web-based software applications.

Action Plan:

Network

Install Parent Access Module on Pentamation server.	\$1,000.00
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Software

Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)	\$138,000.00
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Staff Development

Train parents and/or building level staff on use of the Parent Access Module.	\$0.00
Train IT personnel to support Parent Access Module.	\$0.00

End User

Publicize Parent Access Module to parents within the District.	\$900.00
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Miscellaneous

Maintain user accounts and security on Parent Access Module.	\$0.00
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Total Cost for Objective **\$139,900.00**

Goal: The District will provide parents and district personnel access to necessary student information.

Associated Objective:

The District will upgrade the student management system interface to provide necessary district personnel with more user-friendly access.

Action Plan:

Software

Replace GradeBook software with Teacher Workstation software.	\$11,200.00
Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)	\$138,000.00

Staff Development

Train necessary District personnel on Pentamation System.	\$7,200.00
Train teachers on Teacher Workstation software.	\$12,000.00

End User

Maintain service agreement for student data/financial accounting system.	\$114,000.00
Total Cost for Objective	\$282,400.00

Communication & Information Access Goal: The District will provide the educational community access to educational resources.

Associated Objective:

The District, schools and community-related programs will provide and post pertinent information such as events and announcements on the District website.

Action Plan:

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.	\$8,000.00
Purchase two servers to house web-based database applications.	\$19,000.00
Install Microsoft 2000 Server and other necessary software on servers (IIS, SQL and web-based database application software).	\$11,000.00

Software

Purchase necessary server software (Windows 2000, IIS, SQL, web-based database application).	\$71,000.00
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Staff Development

Train authorized users on how to post information to the District website.	\$0.00
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End User

Publicize to the educational community what information is available on the web, and how to access it.	\$900.00
Develop procedures and policies for posting information on the District website.	\$0.00

Miscellaneous

Maintain user accounts for Web Server.	\$0.00
Maintain security to confidential web pages.	\$0.00

Total Cost for Objective **\$109,900.00**

Goal: The District will provide the educational community access to educational resources.

Associated Objective:

The District will provide web-based research resources to the educational community.

Action Plan:

Network

Create and maintain education links page on District website.	\$0.00
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End User

Develop procedure for submitting educational links to the District website.	\$0.00
Provide access to online research databases.	\$87,000.00

Miscellaneous

Investigate potential partnerships with educational institutions for providing educational resources.	\$0.00
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Total Cost for Objective **\$87,000.00**

Goal: The District will provide the educational community access to educational resources.

Associated Objective:

The District will provide a homework hotline, for students and parents, via the telecommunication systems.

Action Plan:*Network*

Roll out homework hotline to all schools within the District. \$0.00

Staff Development

Train IT staff on support of homework hotline. \$0.00

Train teachers on how to setup and use the homework hotline. \$0.00

End User

Publicize to students and parents how to access the homework hotline. \$1,500.00

Miscellaneous

Maintain user accounts and mailboxes on the telecommunications system. \$0.00

Total Cost for Objective **\$1,500.00**

Goal: The District will provide the educational community access to educational resources.

Associated Objective:

The District will provide remote access for students to use technology resources as needed for course work.

Action Plan:*Network*

Purchase and install any necessary equipment to support student remote access. \$42,000.00

Software

Install any necessary software to support student remote access. \$5,400.00

Create and maintain student accounts for remote access. \$0.00

Staff Development

Train students on how to access network resources remotely. \$0.00

Train teachers on how to support student remote access. \$0.00

End User

Develop policy on student usage through remote access. \$0.00

Miscellaneous

Research options to allow students to connect to network resources from remote locations. \$0.00

Determine which students need remote access to network resources. \$0.00

Total Cost for Objective **\$47,400.00**

Goal: The District will provide the educational community access to educational resources.

Associated Objective:

Achieve a ratio of one computer per student.

Action Plan:*Hardware*

If necessary, purchase additional machines for previously renovated buildings in order to achieve the 1:1 ratio within that building.	\$300,000.00
Provide students in grades 8-12 with laptops to support "education anytime, anywhere" district initiative.	\$3,769,500.00
Move machines from building areas under renovation to other buildings to work towards the 1:1 ratio.	\$30,000.00
As renovations are completed, purchase new computers to achieve the 1:1 ratio within the renovated building.	\$2,250,000.00
Replace student machines with new machines, as they become outdated.	\$366,000.00

Miscellaneous

Survey current number of student machines in the classrooms and compare to the number of students within each building.	\$0.00
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Total Cost for Objective **\$6,715,500.00**

Goal: The District will provide the educational community access to educational resources.

Associated Objective:

Provide students with out of school day access to technology.

Action Plan:

Hardware

Provide students in grades 8-12 with laptops to support "education anytime, anywhere" district initiative.	\$3,769,500.00
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Technology Staffing

Pay overtime/supplementals to employees to supervise after school programs and/or extended library hours.	\$402,000.00
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Miscellaneous

Research and implement after school programs that give students access to technology.	\$0.00
Research option of extending library hours to include weekends/evenings.	\$0.00

Total Cost for Objective **\$4,171,500.00**

Communication & Information Access Goal: The District will improve communications between all members of the educational community.

Associated Objective:

The District will provide e-mail access to students as necessary for course work.

Action Plan:

Software

Implement e-mail system for students.	\$0.00
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Staff Development

Train school level staff how to maintain student e-mail accounts.	\$0.00
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End User

Develop policy on student e-mail usage.	\$0.00
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Miscellaneous

Research options for e-mail service for students	\$0.00
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Total Cost for Objective **\$0.00**

Goal: The District will improve communications between all members of the educational community.

Associated Objective:

The District will maintain and upgrade the web-based e-mail system for district staff to send and receive e-mail from within the district or remote locations on a 24 x 7 basis.

Action Plan:*Network*

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.	\$8,000.00
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Software

Research, evaluate and possibly upgrade GroupWise software on server.	\$6,200.00
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Staff Development

Continue to offer beginning, intermediate and advanced level training on e-mail system.	\$0.00
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Miscellaneous

Maintain user accounts on GroupWise system.	\$0.00
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Total Cost for Objective	\$14,200.00
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Goal: The District will improve communications between all members of the educational community.

Associated Objective:

The District will upgrade and maintain 24 x 7 access to the district voice mail system to facilitate communication between district personnel and the educational community.

Action Plan:*Network*

Maintain and upgrade the PBX system, both hardware and software.	\$315,000.00
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Staff Development

Train district personnel on use of the voice mail system.	\$0.00
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Miscellaneous

Maintain user accounts and mailboxes on the telecommunications system.	\$0.00
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Total Cost for Objective	\$315,000.00
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Goal: The District will improve communications between all members of the educational community.

Associated Objective:

The District will provide necessary District personnel with the ability to connect from remote locations to the district network.

Action Plan:*Network*

Upgrade from T1 line to multiple T3 lines to handle additional dial-up lines.	\$108,000.00
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Research and implement options to allow personnel to connect from remote locations 24 X 7 (wireless, VPN, dial-up)	\$232,000.00
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Staff Development

Train personnel on dial-up access.	\$0.00
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Miscellaneous

Maintain dial-up accounts for necessary district personnel.	\$0.00
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Total Cost for Objective **\$340,000**
.00

Curriculum & Learning Goal: The District teaching staff will use a variety of technology tools to improve instructional activities.

Associated Objective:

Expand existing curriculum based instructional system in grades K-8 (NCSLearn)

Action Plan:

Hardware

Evaluate current hardware to see if match system requirements for NCS Learn workstation upgrade.	\$0.00
Upgrade or purchase/replace hardware to match NCS Learn system requirements.	\$30,000.00

Network

Maintain and upgrade all network servers (incl. e-mail, web, database). Upgrade Novell servers to NetWare 6.	\$8,000.00
Purchase additional servers so that have one NCS Learn server for each school.	\$44,000.00
Upgrade existing NCS Learn server software to the latest version.	\$222,000.00
Purchase and install NCS Learn server software on new servers.	\$0.00

Software

Install updated version of NCS workstation software on licensed machines within the District.	\$0.00
Purchase additional NCS Learn workstation licenses to work towards a goal of 1 license for every 5 students.	\$100,000.00

Staff Development

Train teaching staff on the upgraded version of NCS Learn.	\$0.00
Train IT Integration Division on upgraded version of NCS Learn.	\$5,600.00

Technology Staffing

Hire Technology Integrators (tentative goal - six).	\$0.00
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End User

Provide support to teachers and students on the new version of NCS Learn.	\$0.00
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Total Cost for Objective **\$409,600**
.00

Goal: The District teaching staff will use a variety of technology tools to improve instructional activities.

Associated Objective:

Implement a curriculum based instructional system in grades 9-12.

Action Plan:

Hardware

Survey hardware in desired locations within high school to determine if meet the minimum requirements of the chosen software.	\$0.00
Upgrade/purchase machines to support the selected software program (9-12 curriculum instructional software).	\$81,000.00

Network

If needed, purchase server(s) to house the chosen software package (9-12 curriculum based instructional software)	\$168,000.00
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Software

Research available options for 9th-12th grade instructional systems.	\$0.00
Purchase software licenses for chosen system.	\$186,000.00
Install software in classrooms/labs at the high school.	\$0.00

Staff Development

Train teaching staff on use of the software package, including how to integrate it into their daily lesson plans.	\$0.00
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Technology Staffing

Hire Technology Integrators (tentative goal - six).	\$0.00
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Total Cost for Objective **\$435,000.00**

Goal: The District teaching staff will use a variety of technology tools to improve instructional activities.

Associated Objective:

Implement an auditory processing system in grades 2-5 (FastForWord)

Action Plan:

Hardware

Upgrade or purchase hardware for classrooms that do not have enough machines to support the number of licenses allocated for the classroom. (auditory processing system)	\$90,000.00
Survey hardware in classrooms to determine if match system requirements for Fast ForWord program.	\$0.00
Install additional machines in classrooms to support the Fast ForWord program.	\$0.00

Network

Purchase/install additional networking equipment to support additional machines in non-renovated buildings. (i.e. network jacks, hubs, electrical outlets)	\$10,900,000.00
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Software

Install software in 2nd-5th grade classrooms.	\$0.00
Purchase software licenses for Fast ForWord program.	\$456,000.00

Staff Development

Train teachers on use of the Auditory Processing software package.	\$0.00
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Technology Staffing

Hire Technology Integrators (tentative goal - six).	\$0.00
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Total Cost for Objective **\$11,446,000.00**

Curriculum & Learning Goal: The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

Associated Objective:

Expand the integration of technology in the curriculum and classroom.

Action Plan:

Staff Development

Send integrators to workshops/seminars to acquire new methods of integrating technology into the curriculum.	\$5,400.00
Hold training workshops with teachers to show how to use technology in the different subject areas/grade levels.	\$0.00
Through PTO/PTA, bring parents into the classroom to work with students in the area of technology.	\$0.00

Technology Staffing

Hire Technology Integrators (tentative goal - six).	\$0.00
End User	
Develop and maintain a software and technology literature library.	\$18,000.00
Provide support to teachers as they integrate technology into their curriculums.	\$0.00
Evaluate current technology and academic curriculums, and revise to include technology standards.	\$20,400.00
Total Cost for Objective	\$43,800.00

Goal: The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

Associated Objective:

Train all teaching staff on District technology (software and hardware) to support the technology and academic curriculums.

Action Plan:

Staff Development

Develop training classes for new courses and add courses to the training schedule.	\$0.00
Offer training to District personnel.	\$0.00
Work with Harrisburg Area Community College to provide additional classes to teaching staff.	\$0.00
Hire substitutes so teachers can attend technology training.	\$1,442,800.00
Determine appropriate training for District positions.	\$0.00

Technology Staffing

Hire Technology Trainers (See Salaries for Technology Integration Department)	\$0.00
End User	
Develop and maintain a software and technology literature library.	\$18,000.00
Total Cost for Objective	\$1,460,800.00

Goal: The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

Associated Objective:

Revise the current technology curriculum for grades K-12 and develop a technology curriculum for the early education program.

Action Plan:

Software

Evaluate prepackaged curriculums from vendors and curriculums from other districts to assist in revisions/creation of technology curriculum.	\$0.00
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Technology Staffing

Determine staffing needs for new curriculum and hire additional teachers if necessary.	\$0.00
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End User

Communicate new curriculum information to teaching staff.	\$0.00
Assist in implementing new curriculum.	\$0.00

Miscellaneous

Investigate/develop partnerships with EMO, Avaya, and other local businesses to provide students with internships.	\$0.00
Investigate/develop partnership with the State Library to provide additional research tools to students.	\$0.00
Create new or review current curriculum for each grade level and make necessary revisions based on PDE standards and available technology.	\$0.00
Create a committee for each grade level comprised of teachers, and representatives from Academic Services and Information Technology.	\$20,400.00
Total Cost for Objective	\$20,400.00

Goal: The District will provide teachers and students with the necessary technology skills to facilitate critical thinking, problem solving, decision making, and analytical skills.

Associated Objective:

Develop digital student portfolio system to allow students to demonstrate academic skills and teachers to assess students skills.

Action Plan:

Hardware

Purchase additional hardware (digital still and video camers, scanners, etc.) to support the portfolio system.	\$116,000.00
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Network

Purchase servers to house portfolio software and data.	\$63,600.00
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Software

Develop custom screen(s) in student/financial management systems to house additional data.	\$0.00
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Purchase/develop software to house portfolio data via the intranet/internet.	\$19,000.00
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Upgrade student/financial management systems software and purchase new modules for the system (Parent Notification, Parent Access, etc.)	\$138,000.00
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Staff Development

Train IT on use/support of portfolio systems.	\$0.00
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Train users (teachers/students) on use of the portfolio systems (how to add/update information, etc.).	\$0.00
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Miscellaneous

Develop Acceptable Use Policy on use of portfolio system(s).	\$0.00
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Research options to provide portfolio system to students/parents/teachers.	\$0.00
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Total Cost for Objective	\$336,600.00
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Curriculum & Learning Goal: The District will use technology to facilitate existing, advanced and accelerated curricular and academic programs.

Associated Objective:

Support new District initiatives that focus on, but are not limited to, the acceleration and advancement of literacy, math, science, fine arts, and technology.

Action Plan:

Hardware

Purchase/upgrade hardware to support new District initiatives.	\$240,000.00
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Network

Install/upgrade network components to support new District initiatives.	\$7,100,000.00
<i>Software</i>	
Purchase software to support District initiatives (curriculum needs, etc).	\$136,000.00
<i>Staff Development</i>	
Offer training to District personnel.	\$0.00
<i>End User</i>	
Determine the technological needs of new District initiatives as they are defined.	\$0.00
Total Cost for Objective	\$7,476,000.00

Goal: The District will use technology to facilitate existing, advanced and accelerated curricular and academic programs.

Associated Objective:

Provide additional educational opportunities beyond the traditional school boundaries through online courses.

Action Plan:

<i>Hardware</i>	
purchase necessary laptops, scanners, and printers for students and teachers involved in online courses	\$79,000.00
<i>Staff Development</i>	
provide necessary training for students and teachers on online course software	\$0.00
train IT staff on supporting online course software support	\$300.00
<i>Miscellaneous</i>	
Join and maintain membership in Pennsylvania Virtual Academy Coalition.	\$2,500.00
Fund supplemental contracts for writing and teaching online courses.	\$54,000.00
research additional online courses for students	\$0.00
Total Cost for Objective	\$135,800.00

Goal: The District will use technology to facilitate existing, advanced and accelerated curricular and academic programs.

Associated Objective:

Provide additional educational opportunities beyond the traditional school boundaries through distance learning.

Action Plan:

<i>Hardware</i>	
upgrade or replace existing Distance Learning equipment (carts and MCU)	\$68,000.00
<i>Network</i>	
configure new Distance Learning equipment on network	\$12,000.00
<i>Software</i>	
install necessary software on Distance Learning equipment (carts and MCU)	\$0.00
<i>Staff Development</i>	

train teaching staff on how to operate Distance Learning equipment	\$0.00
train IT staff on supporting new Distance Learning equipment	\$7,200.00
<i>End User</i>	
maintain service agreement for Distance Learning equipment	\$144,000.00
<i>Miscellaneous</i>	
maintain PDL membership (Partners in Distance Learning)	\$1,500.00
investigate possible virtual fieldtrips and courses for students	\$0.00
Total Cost for Objective	\$232,700.00

Section 9 - Plan Review and Evaluation

9.1 PLAN MONITORING STRATEGIES

9.1.1 Plan Monitoring Process

The Technology Planning Committee will also serve as the Technology Plan Monitoring Committee. It will meet at regular intervals throughout the year to evaluate progress on the technology plan, as well as examine the impact of the different areas of the plan on student achievement. Summary reports of student progress will be provided showing overall student achievement in the different curriculum software packages. Summaries will also be provided showing changes on test scores within the portfolio system as well as the PSSA and SAT9.

The Director of Technology will oversee the various projects of the Technology Plan. Most projects will be headed by a member of the IT Department, although a few are the responsibility of other departments such as Academic Services. Updates as to the status of the various projects will be provided to the District Cabinet at weekly meetings, who will then communicate that information to the Board of Control.

Information about the various programs as well as their impact on student achievement will be posted on the District website for District employees as well as the community to view. Teachers and administrators will have access to data in the student management system as well as the reports within the various software packages.

9.2 EVALUATION STRATEGIES

9.2.1 Impact Assessment

Student achievement will be tracked utilizing the new portfolio system and screens in the student information system. The custom screens will contain data such as PSSA scores, SAT9 scores, and data from tests administered by teachers throughout the school year. By comparing changes in test results with student participation in different programs, the District will be able to assess the benefits of such programs.

The curriculum based software and other software packages (such as the auditory processing system) have reports built in that allow teachers and administration to track student progress. These reports highlight problem areas, as well as show progress over time.

All of this information will be accessible to administrators and teachers. Custom reports will be designed to assist in interpreting the data. Due to confidentiality issues, specific student data cannot be posted to the District website, however averages and changes for buildings or grade levels will be posted for the community to view.

In addition, this information will be presented to the Technology Plan Monitoring Committee who will use it to evaluate the Technology Plan and make recommendations for revisions.